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TEACHER CRISIS: MYTH OR REALITY?

A State-by-State Analysis 1986

C. Emily Feistritzer

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Teacher Crisis: Myth or Reality?
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Contents

INTRODUCTION

Chapter 1: THE CRISIS AND THE REALITY 1
New Hires....7
Turnover Rates....7
Who are the New Teachers and Where are They Coming From?....8

Chapter 2: WHO IS GOING INTO TEACHING NOW
The Quality Issue....13
Scholastic Aptitude Test Scores....15
What's Most Important on a Job....17
Leave Teaching for More Money Elsewhere?....19
Longer School Year?....19
Job Satisfaction....19
Academic Preparation for Teaching....23
Sex....25
Race....26
Union Membership....27

Chapter 3: CERTIFICATION 29
Emergency Certificates....31
NCEI TEACHER CERTIFICATION SURVEY State by State....32
Alternate Certification....44
Teacher Shortages....46

Chapter 4: ENROLLMENT TRENDS 51
Elementary School Enrollments....54
Secondary School Enrollments....57

Chapter 5: NUMBERS OF TEACHERS 59
Numbers of Teachers in Elementary Schools....61
Numbers of Secondary School Teachers....63

Chapter 6: SALARIES 65
Teacher Salaries State by State....72
Teacher Salaries Compared with Those of Other Workers State by State....72
Beginning Teacher Salaries....76

Chapter 7: POPULATION TRENDS
Total Births and Fertility Rates....77
Growth Rates of the Population by Race....80
Regional Population Trends....83

Chapter 8: WHERE THE NATION'S YOUTH GOES TO SCHOOL
School Enrollment by Type of Community....85
Who Goes to Public Schools....87
Who Goes to Private Schools....87

SUMMARY AND CONCLUSIONS 90

Introduction

Much has been made in recent years of a crisis in teaching. The big question everybody asks is whether or not the nation will have enough qualified people to teach its children. Dire statements abound, such as, "A million additional teachers will have to be hired in the next five years to meet the demand of incoming students" and "By the early 1990's, supply of teachers will be only two-thirds of demand." There are others. They are rooted in assumptions current teachers are leaving at a dangerously fast rate and fewer people are choosing to become teachers.

In keeping with its objective to gather and analyze data that present the whole picture, the National Center for Education Information (NCEI) undertook the task of surveying each state about certification of teachers, emergency certificates, turnover rates, shortages and projected shortages. We analyzed data from our survey of teachers conducted February 8 - April 15, 1986 by years of experience to see how people coming into teaching now compare with teachers who have been around for awhile. In addition, we compiled all the available data from other sources we could find about the current condition of teaching in America.

TEACHER CRISIS: MYTH OR REALITY? A State-by-State Analysis 1986 is the result of those efforts. It presents and analyzes data about numbers of teachers and students, turnover rates, emergency certificates, shortages and new hires. It sets forth new data about the characteristics of teachers hired within the last five years. The report gives the results of a teacher certification survey conducted by NCEI in summer and fall of 1986 that sheds new light on whether or not there are enough certified teachers. It analyzes salaries of teachers and other workers state by state. And, finally, the report presents data about population trends and where the nation's youth go to school that can be used in planning who will be needed for teaching and where they will be needed.

A project of this magnitude could not be accomplished without the help of many people. I wish especially to thank the following for their advice and consultation: Stafford Metz, Arthur Wise, John Seitsma, Joan Wills, Vance Grant, Chuck Nelson, Howard Nelson and Dan Hecker. My appreciation goes to all the people in the state departments of education who put up with our persistence and answered our questions forthrightly. My deepest gratitude goes to my associates who put in long hours and always make an effort like this worthwhile for me: Warren Rogers, Fred Quelle, Larry O'Rourke, Aileen Cooper, Marcia Bourgoine, Phyllis Ince and Suzanne Currie.

Emily Feistritzer
December 1986

Chapter 1: The Crisis and the Reality

The year 1983 marked a turning point for education in America. A flood of reports describing its deficiences followed the warning there was "a rising tide of mediocrity" and that, unless the tide reversed, we would truly be "a nation at risk." Three years later, there is ample evidence the tide has turned and American education is once again meeting demands and, in some areas, thriving.

In addition to being the year of education reports, 1983 was the year elementary and secondary school enrollments bottomed out after more than a decade of steady decline. The baby boomers born in the population explosion following World War II had all passed through high school, and nowhere near their numbers were around to take their place. A baby boomlet in the late 1970's and early 1980's meant a halt to the decline in elementary school enrollment.

As projected, enrollments in elementary schools started edging upward in 1984-85. But, contrary to predictions, there seems to be no problem finding enough qualified teachers to meet demand. As a matter of fact, during the period that enrollments plummeted -- starting in the early 1970's and reaching a low in 1983-84, the number of teachers rose. There were about 8,000 more classroom teachers and 6.7 million fewer students in the nation's public elementary and secondary schools in 1983-84 than in 1972-73, according to the National Education Association's data.[,1]

While enrollments have risen slightly since 1983-84, the number of additional teachers is more impressive. Total public elementary and secondary enrollment increased by 244,428 (0.5 percent), whereas the number of teachers increased by 60,794 (2.8 percent) from 1983-84 to 1985-86. That's an additional teacher for every four additional students.

The current growth in total enrollment is due exclusively to increases at the elementary level, as anticipated, since the children of the late-1970's boomlet are starting school. However, the increase in net number of teachers is due to the adding of teachers at both the elementary and secondary levels.

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1. The NEA defines a classroom teacher as "A person who performs the day-to-day activities of teaching students all or aspects of the regular curriculum."

TABLE 1. ENROLLMENT AND NUMBERS OF TEACHERS BY LEVEL WITH CHANGES: 1972-73, 1983-84 AND 1985-86

	Number			1972-73 to 1983-84		1983-84 to 1985-86		1972-73 to 1985-86	
	1972-73	1983-84	1985-86	#	%	#	%	#	%
Elem. & Sec.									
Students	45,960,736	39,223,841	39,468,269	-6,736,895	-14.6	+244,428	+0.5	-6,492,467	-14.1
Teachers	2,108,846	2,117,057	2,177,851	+ 8,211	+ 0.4	+ 60,794	+2.9	+ 69,005	+ 3.3
Elementary									
Students	26,811,059	23,443,766	24,013,897	-3,367,293	-12.6	+570,131	+2.3	-2,797,162	-10.3
Teachers	1,142,938	1,171,053	1,211,516	+ 28,115	+ 2.5	+ 40,463	+3.4	+ 68,578	+ 6.0
Secondary									
Students	19,149,677	15,780,075	15,454,372	-3,369,602	-17.6	-325,703	-2.0	-3,695,305	-19.3
Teachers	965,908	946,004	966,335	- 19,904	- 2.0	+ 20,331	+2.1	+ 427	+ 0.04

SOURCE: Basic data from the National Education Association, Estimates of School Statistics, Selected years.

Elementary school enrollments have increased overall in the nation's public schools in each of the last two years -- by 1.3 percent from 1983-84 to 1984-85, and an additional 1.0 percent the following year, for a net increase of a little over a half-million students (570,131).

There were 40,463 more teachers employed in those elementary schools in 1985-86 than there were two years earlier, representing a 3.4 percent increase in the elementary school teaching force.

It has gone almost unnoticed that, during the period that elementary school enrollments plummeted, the number of teachers actually rose. In 1983-84 -- the school year of lowest enrollment -- there were 3.4 million fewer students and 28,115 more teachers in public elementary schools than there were in 1972-73 -- the peak year of elementary school enrollment. One obvious effect of the change in teacher-student ratios was to reduce class sizes. Also, more teachers were utilized to accommodate children with special needs, such as the handicapped and the non-English-speaking.

In 1985-86, the year demand was supposed to start outstripping supply of teachers, there were 68,578 more teachers employed in the nation's elementary schools than in peak-enrollment, 1972-73, and 40,463 more than in the lowest year of enrollment, 1983-84. Public elementary schools employed 13,284 more teachers in 1984-85 than in 1983-84, and 27,179 more in 1985-86 than in the previous year.

At the secondary level, the story is a little different. While the number of students enrolled in public secondary schools in 1983-84 was 3.4 million fewer than in 1972-73, the number of teachers was also down -- by 19,904. However, secondary school enrollments continue to decline and are expected to do so until the current blip of elementary school children reaches high school in the early 1990's. Whereas public secondary schools enrolled 325,703 (2.0 percent) fewer students in 1985-86 than they did two years earlier, they employed 20,331 (2.1 percent) more teachers. One explanation for this rather noteworthy increase in number of secondary school teachers, at a time of continuing enrollment decline, is the implementation of such reforms as adding more English, social studies, mathematics and science courses as prerequisites for getting a high school diploma.

At both the elementary and secondary levels, by strict headcounts, the number of students per teacher dropped significantly from the period of highest student enrollments to lowest enrollments. What is more important is that the ratios are holding at the lower figures, even though enrollments are starting to climb. In 1972-73, the number of elementary students per teacher was 23. At the secondary level, it was 20. By 1983-84, the ratios were 20:1 and 17:1, respectively. Last year, with elementary enrollments up and secondary enrollments down, and with teachers at both levels up, the ratios were still 20 students per teacher at the elementary level and down to 16:1 at the secondary level.

TABLE 2 Average number of students per teacher, by state: 1972-73 and 1982-83

	Elementary and Secondary Schools		Elementary Schools		Secondary Schools	
	1972-73	1982-83	1972-73	1982-83	1972-73	1982-83
United States	22	18	23	20	20	16
Alabama	23	18	24	19	22	17
Alaska	20	15	22	16	18	15
Arizona	24	19	25	19	24	18
Arkansas	22	19	24	20	20	17
California	24	23	24	26	24	19
Colorado	23	19	25	21	21	17
Connecticut	20	16	25	18	13	13
Delaware	22	17	26	19	18	16
District of Columbia	21	18	22	17	20	19
Florida	25	18	26	17	23	19
Georgia	22	18	28	19	20	18
Hawaii	26	20	24	17	28	24
Idaho	23	20	24	22	21	18
Illinois	21	18	23	19	19	16
Indiana	23	20	25	21	22	19
Iowa	21	16	23	18	18	14
Kansas	19	15	21	17	17	14
Kentucky	23	20	23	21	22	20
Louisiana	21	18	24	23	18	12
Maine	22	17	26	19	16	14
Maryland	22	19	24	19	20	18
Massachusetts	21	18	23	28	18	10
Michigan	24	23	24	23	24	23
Minnesota	20	18	22	18	18	17
Mississippi	23	19	23	18	22	18
Missouri	22	17	30	23	13	10
Montana	20	17	23	22	16	11
Nebraska	19	16	19	18	18	14
Nevada	24	20	25	21	24	20
New Hampshire	20	16	22	18	18	14
New Jersey	19	16	23	17	15	14
New Mexico	23	19	22	22	24	16
New York	19	17	20	18	17	16
North Carolina	23	20	24	23	21	15
North Dakota	20	16	21	17	18	13
Ohio	23	20	26	21	19	18
Oklahoma	22	17	22	19	21	16
Oregon	22	18	23	18	20	18
Pennsylvania	21	17	23	19	20	16
Rhode Island	20	16	21	15	19	17
South Carolina	23	19	24	21	22	15
South Dakota	20	16	21	16	18	14
Tennessee	24	21	25	24	23	16
Texas	22	18	22	21	21	14
Utah	25	25	26	24	24	25
Vermont	18	14	20	16	14	12
Virginia	20	17	22	18	17	16
Washington	24	21	22	21	27	22
West Virginia	23	17	24	18	22	16
Wisconsin	20	15	21	15	18	14
Wyoming	19	14	20	15	18	13

SOURCE: Computed from selected data in The National Education Association,

Reprinted from: C. Emily Feistritzer, The Condition of Teaching: A State by State Analysis, The Carnegie Foundation for the Advancement of Teaching, Princeton, NJ, 1983.

TABLE 3

State	NUMBER OF ELEMENTARY STUDENTS PER TEACHER			NUMBER OF SECONDARY STUDENTS PER TEACHER		
	1983-1984	1984-1985	1985-1986	1983-1984	1984-1985	1985-1986
United States.....	20	20	19	16	16	15
Alabama.....	19	21	20	17	19	18
Alaska.....	15	13	17	12	18	16
Arizona.....	21	21	23	21	22	23
Arkansas.....	19	19	20	15	16	16
California.....	42	42	43	20	19	20
Colorado.....	20	21	21	15	16	16
Connecticut.....	17	16	16	11	11	11
Delaware.....	18	18	18	15	15	14
District of Columbia	14	14	1[illegible]	16	16	18
Florida.....	16	16	16	19	19	18
Georgia.....	19	18	18	17	18	18
Hawaii.....	19	19	20	20	20	19
Idaho.....	22	22	22	18	18	18
Illinois.....	19	19	18	16	16	16
Indiana.....	20	20	19	18	18	18
Iowa.....	18	18	18	14	13	13
Kansas.....	17	17	17	13	13	13
Kentucky.....	20	20	19	19	18	18
Louisiana.....	20	21	20	14	15	14
Maine.....	18	17	16	13	14	14
Maryland.....	19	18	19	17	16	15
Massachusetts.....	29	27	25	8	8	8
Michigan.....	26	26	26	17	16	15
Minnesota.....	18	18	17	16	17	16
Mississippi.....	18	19	19	18	17	17
Missouri.....	23	22	21	10	10	10
Montana.....	17	16	15	14	14	14
Nebraska.....	17	16	16	14	14	13
Nevada.....	21	19	20	20	21	19
New Hampshire.....	18	17	15	14	13	15
New Jersey.....	17	16	16	13	13	12
New Mexico.....	18	17	17	19	18	19
New York.....	18	18	19	19	19	18
North Carolina.....	23	23	22	15	14	14
North Dakota.....	17	18	16	12	13	11
Ohio.....	21	21	21	17	15	15
Oklahoma.....	18	18	17	14	15	15
Oregon.....	19	19	19	17	16	15
Pennsylvania.....	17	17	17	16	16	15
Rhode Island.....	19	18	15	17	17	14
South Carolina.....	20	19	19	15	14	14
South Dakota.....	16	16	15	13	13	14
Tennessee.....	24	23	22	15	16	15
Texas.....	24	24	26	19	19	19
Utah.....	23	23	23	25	25	25
Vermont.....	16	17	16	13	12	11
Virginia.....	17	17	17	16	15	15
Washington.....	20	20	20	22	21	21
West Virginia.....	17	17	16	15	14	14
Wisconsin.....	17	17	17	15	15	16
Wyoming.....	12	12	11	17	19	18

SOURCE: Basic data from the National Education Association, Estimates of School Statistics, Selected years.

Table 4

American Federation of Teachers Salary Report
NEW HIRES ENTERING TEACHING FOR THE FIRST TIME AND THOSE REENTERING WITH PREVIOUS EXPERIENCE

State	Number of New Hires		Reentering As A Percent of New Hires	Teachers	New Hires As Percent of Teachers
	Entering 1985-86	Reentering 1985-86			
Arkansas	1377	883	39.1%	25573	8.8%
Colorado	1741				
Connecticut	1331	1847	58.1%	35609	8.9%
Delaware	114	152	57.1%	5745	4.6%
Georgia	2792				
Hawaii	438				
Illinois	3182	5330	62.6%	96527	8.8%
Indiana	1667	1006	37.6%	50306	5.3%
Kansas	1018	360	26.1%	26658	5.2%
Kentucky	1473	807	35.4%	33670	6.8%
Louisiana	3500				
Maryland	1100	1125	50.6%	39092	5.7%
Massachusetts	2279				
Michigan	3000				
Minnesota	1586	1193	42.9%	40369	6.9%
Nebraska	845	547	39.3%	19750	7.0%
New Jersey	897	1615	64.3%	73774	3.4%
New Mexico	1144				
North Carolina	1980	1516	43.4%	57638	6.1%
North Dakota	846				
Ohio	3911	4411	53.0%	98267	8.5%
South Carolina	1619	2880	64.0%	34532	13.0%
South Dakota	398	237	37.3%	8152	7.8%
Texas	10887	11097	50.5%	175500	12.5%
Utah	1216				
Washington	861	656	43.2%	36191	4.2%
Wisconsin	1400				
Wyoming	314	318	50.3%	6306	10.0%
U.S. Average/Total	52,916	35,980	51.0%	863,659	10.3%

SOURCE: The American Federation of Teachers, Survey & Analysis of Salary Trends, page 36.

New Hires

A study conducted by the Department of Education's Center for Statistics in 1983-84 shows that 212,000 new teachers were hired that year constituting 7.9 percent of the entire elementary and secondary teaching force. The Center had estimated 148,000 new teacher graduates would be needed to meet demand in 1983-84.

The American Federation of Teachers issued a report in July 1986 showing that 28 states representing 863,659 of the nation's 2.2 million public school teachers hired 52,916 new teachers in 1985-86. New hires, according to the AFT data, made up 10.3 percent of the entire teaching force in these states. If the ten percent figure held up nationwide, approximately 220,000 new teachers could have been hired in 1985-86.

Turnover Rates

Much controversy centers on turnover rates for teachers -- the speculation being teachers are leaving in droves. The most often-cited source for this notion is the Metropolitan Life Survey of the American Teacher 1985. The survey asked teachers, "Have you ever seriously considered leaving teaching for a job in another field?" Fifty-one percent answered "yes" and the headlines read "Half the nation's teachers are thinking about leaving teaching." Another question in the survey asked teachers if they planned to leave in the next five years. About a third of them said they did. Thus the headlines, "A third of the nation's teachers plan to leave teaching in the next five years." Both of these statements are true but no cause for alarm. We've been losing a third of our teachers every five years for decades, and the fact that 49 percent of teachers said they had never considered leaving teaching for a job in another field is pretty amazing.

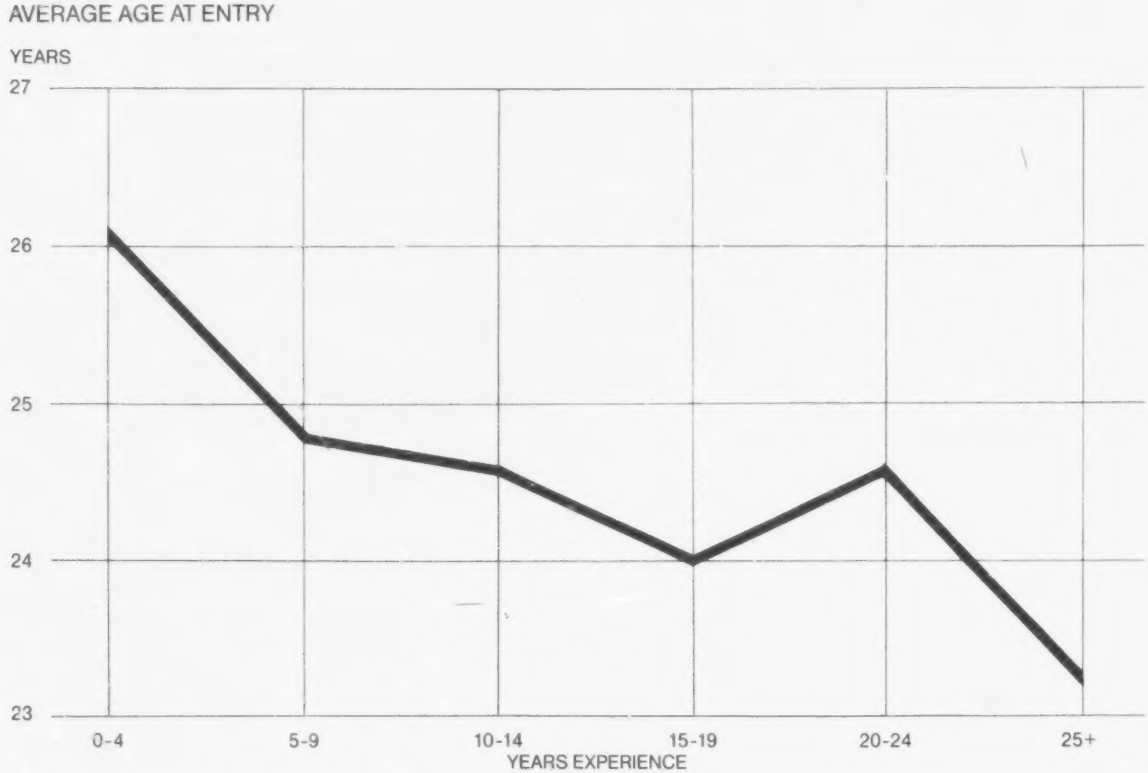
The annual turnover rate for teachers has been about six percent since the early 1970's according to the Bureau of Labor Statistics, the Center for Education Statistics and the National Education Association. The Bureau of Labor Statistics reports the annual turnover rate for all professional specialties is 10.7 percent. The Bureau further states that annual turnover rates of 15-20 percent in the first few years are a normal phenomenon in all occupations.

In projecting future demand for teachers, many argue that, due to an aging teaching force (the average age of teachers is 41 years and the average years of experience is 16), turnover rates will increase dramatically due to retirements. There are others who note that, even if this does happen, it will occur just about the time enrollments start dropping again and demand for teachers will fall off.

Age could become less and less a factor in determining turnover rates of teachers as schools seek out older, more experienced Americans in their recruitment of teachers.

Who Are The New Teachers and Where Are They Coming From?

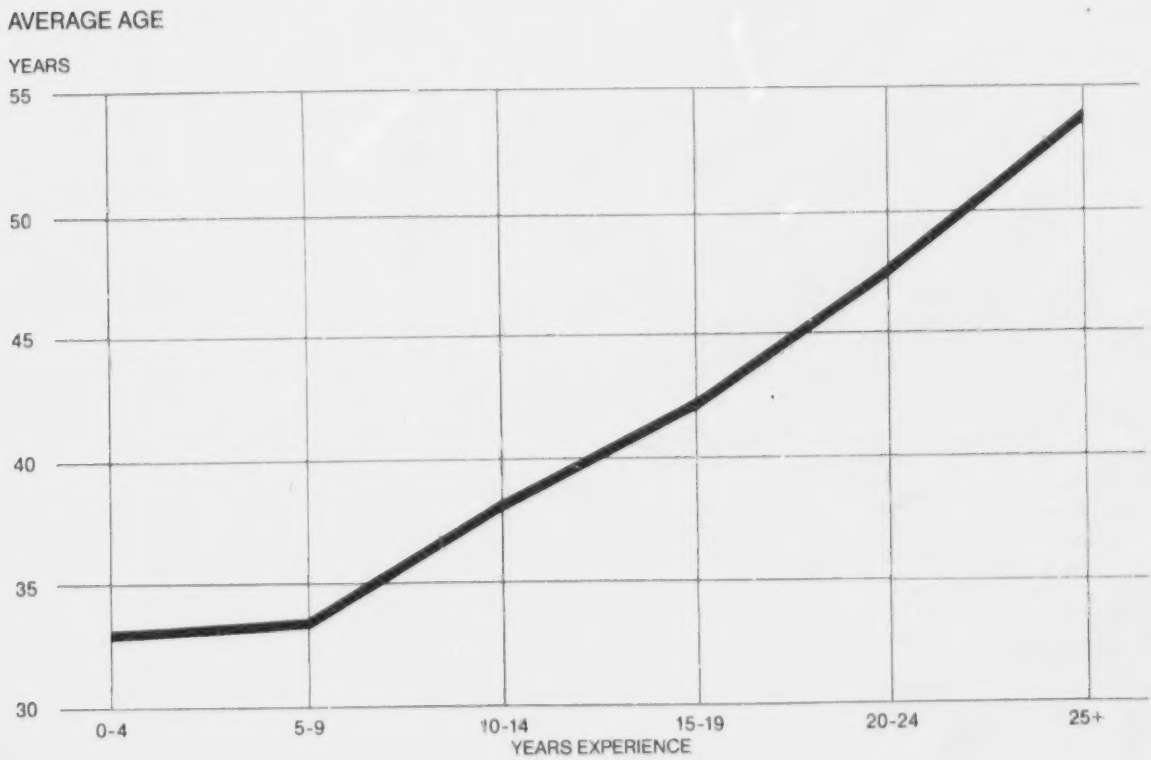
Where teachers are coming from and where they are going to come from are topics of much debate and conjecture. There are those who say that the influx of new teachers is being hired just to fill the demand -- and that the new people probably are not qualified and are teaching on emergency certificates. Not so. A survey, by the National Center for Education Information (NCEI) of State Directors of Teacher Education and Certification in State Departments of Education, conducted this summer and fall, shows that most states issued regular certificates to fully qualified candidates in increasing numbers in each of the last two years. Further, the survey shows more states have eliminated the issuance of emergency certificates altogether. In addition, the states report that the proportion of their teachers on any kind of temporary or emergency certificate is definitely not up and, in many cases, is down.



A survey of state officials by the American Federation of Teachers(AFT) last winter sheds much light on the question, "Where are the people entering teaching today coming from?" AFT found that, among the 28 states from which it got responses, 51.0 percent of those hired in 1985-86 were re-entering teachers -- people who had once taught, left for some reason (not the least of which may have been that they were laid off when enrollments were dropping), and decided, now that jobs are available, to return to teaching.

A survey of teachers conducted by the National Center for Education Information February 8 - April 15, 1986 showed that the average age of those who entered teaching in the last five years is higher than that of people who entered teaching 15 or more years ago -- 26.5, compared with 22.5 for people who entered the profession right after the baby-boom children started entering school 25 years ago.

The average age today of teachers who have been hired in the last five years is 33.0 -- about the same as for the teachers with five to nine years experience as a teacher (33.3).



So, where are the additional teachers coming from? And will there be enough of them to meet demand in the years ahead?

Even though the numbers of people studying to be teachers started a steady decline in 1973, the supply of new teacher graduates continued to outstrip demand until 1985, according to data from the Department of Education's Center for Statistics.

Close scrutiny of the Center for Statistics' data -- the same data so often used to point to a severe shortage of teachers -- shows that, from 1972-73 to 1984-85, there were an estimated 2,627,000 new teacher graduates. The Center's total estimated demand for additional teachers for that period was 1,991,000 -- which is 636,000 fewer than estimated supply.

The Center's projections for the coming years indicate 1,411,000 additional teachers will be needed from 1985-86 through 1992-93, and supply of new teacher graduates during this period will be 1,124,000 -- by 287,000 fewer than the estimated demand.

So, if all the figures hold up, by 1992-93, there will still be a net surplus of 349,000 new teacher graduates. But the figures are not likely to hold up. The Center for Education Statistics' projections of numbers of new teacher graduates is based on the following: "As a percent of bachelor's degree recipients, new teacher graduates dropped from 34 percent to 15 percent between 1970 and 1983. Should the smaller percentage remain fairly stable over the next 10 years, the supply of newly qualified teacher graduates will also remain fairly constant at only about 140,000 per year."[,1]

Several things have happened since 1970 that could have direct bearing on these projections:

• Between 1970 and 1983, while the number of new teacher graduates fell, enrollments in elementary and secondary schools plummeted. Schools closed. Teaching jobs dried up. It is no wonder the numbers of people studying to be teachers dropped during the period. Now that elementary enrollments are up and the word is out that teaching jobs are available, people seem to be stepping forward once again to meet market demand.

• The college pool from which teachers may be drawn is not only growing but is of a different composition than at any earlier time. College enrollments have continued to rise, even though the population of traditional college-age -- 18-to 24-year-olds -- have been declining and will continue to fall for the rest of the decade. College enrollment increased 12.0 percent from 1975 to 1985. The increase among students 25 years old and over accounted

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1. The Condition of Education 1984, U.S. Department of Education, Center for Statistics, pages 8-9.

for two-thirds (65 percent) of the total increase. The number of women in college has doubled since 1970 -- from three to six million. Women now constitute more than half (51 percent) of all college enrollment. These are significant facts, considering that 69 percent of public school teachers are women.

• And, not to be overlooked is what has happened to teachers' salaries in just the last few years. Without exception, every state in the nation has raised salaries for teachers far above the inflation rate in the past four years. While the salaries of the 2.2 million public school teachers are still not on par with those of the 2.2 million doctors, lawyers, dentists, accountants and engineers, the average salary for teachers now is competitive with college graduates in other fields across all age groups.

TABLE 5

Trends in Estimated Demand for Classroom Teachers in Elementary/Secondary Schools and Estimated Supply of New Teacher Graduates: Fall 1970 to Fall 1992

(Numbers in Thousands)

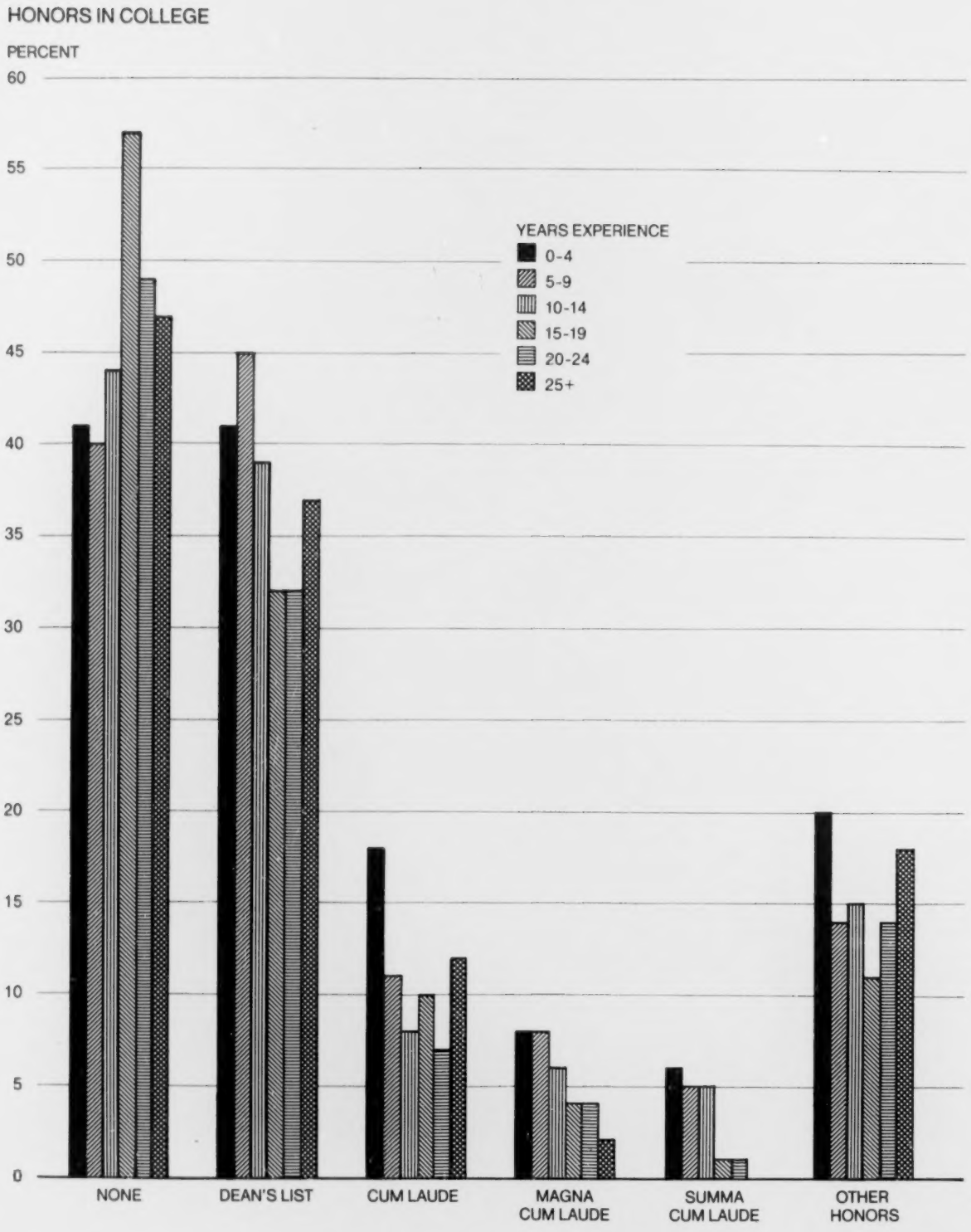
Fall of Year	Total Estimated Teacher Demand	Estimated Demand for Additional Teachers					Estimated Supply of New Teacher Graduates[1]	Supply as Percent of Demand
		Total	Public	Private	Elementary	Secondary		
1970	2,288	208	192	16	115	93	284	136.5
1971	2,293	163	152	11	71	92	314	192.6
1972	2,334	179	164	15	107	72	317	177.1
1973	2,369	175	156	19	89	86	313	178.9
1974	2,410	183	160	23	103	80	279	152.5
1975	2,451	186	161	25	101	85	238	128.0
1976	2,454	150	122	28	78	72	222	148.0
1977	2,488	181	154	27	107	74	194	107.2
1973-77	12,172	**875**	753	122	**478**	**397**	**1,246**	142.4
1978	2,478	138	129	9	82	56	181	131.2
1979	2,459	129	109	20	85	44	163	126.4
1980	2,439	127	110	17	69	58	144	113.4
1981	2,403	110	85	25	66	44	141	128.2
1982	2,401	143	120	23	94	49	143	100.0
1978-82	12,180	**647**	553	94	**396**	**251**	**772**	119.3
					Projected[2]			
1983	2,404	148	125	23	82	66	146	98.6
1984	2,401	142	127	15	78	64	146	102.8
1985	2,413	157	138	19	95	62	146	93.0
1986	2,438	170	143	27	114	56	144	84.7
1987	2,452	160	144	16	114	46	142	88.8
1983-87	12,108	**777**	677	100	**483**	**294**	**724**	93.2
1988	2,468	164	140	24	126	38	139	84.8
1989	2,493	173	146	27	126	47	139	80.3
1990	2,527	183	160	23	131	52	139	76.0
1991	2,569	195	176	19	129	66	138	70.8
1992	2,624	209	181	28	129	80	137	65.6
1988-92	12,681	**924**	803	121	**641**	**283**	**692**	74.9

[1]Estimates for 1971 through 1980 are from National Education Association, *Teacher Supply and Demand in Public Schools, 1980-81*. Other estimates developed by the National Center for Education Statistics.

[2]For methodological details, see *Projections of Education Statistics to 1992-93*, forthcoming.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Projections of Education Statistics to 1992-93*, forthcoming; and National Education Association, *Teacher Supply and Demand in Public Schools, 1980-81*, 1981, copyrighted.

SOURCE: U.S. Department of Education, Center for Statistics, The Condition of Education 1984, page 36


HONORS IN COLLEGE
PERCENT
60
55
50
45
40
35
30
25
20
15
10
5
0
YEARS EXPERIENCE
0-4
5-9
10-14
15-19
20-24
25+
NONE
DEAN'S LIST
CUM LAUDE
MAGNA CUM LAUDE
SUMMA CUM LAUDE
OTHER HONORS

Chapter 2: Who Is Going Into Teaching Now

The Quality Issue

Critics may say, "So the number of teachers is up, but what about the quality?" Hard data on the quality of America's teachers have never existed. One obvious reason is that criteria for what makes a good teacher have never been agreed upon, much less used for hiring, retaining, promoting, or firing teachers.

If the nation has incompetent teachers, it is because it hired them in the first place, then not only tolerated them but protected them. The way to get rid of incompetents in teaching should be no different than it is in any other workplace -- provide them assistance for improvement, and if that fails, replace them with competent people. A system that treats the good and the bad as if they were the same is not attractive to bright, intelligent people. Teaching's tolerance for incompetence and its treatment of all teachers as if they were all alike are big deterrents to recruiting the best available prospects -- perhaps, for some, the biggest deterrents.

There are many signs that these warnings are being heeded. Several colleges and universities that educate teachers have become more selective about whom they let into their programs, and more importantly, whom they let out with their stamp of approval as qualified to teach. Every state has introduced some kind of measure within the last three years designed to weed incompetence from the ranks of teaching. Numerous efforts are in the works to insure that only the qualified get into teaching -- the National Teacher Certification Board and the National Council for the Accreditation of Teacher Education are but two.

The concern about the quality of teachers seems to be paying off. People coming into teaching now are far from the bottom of the barrel. The National Center for Education Information survey of teachers this year, analyzed by years of teaching for the first time in this document, shows that nearly a third (32.4 percent) of teachers with less than five years' experience graduated from college summa, magna or cum laude and 41 percent had been on the Dean's List while in college. More than a fifth of them have at least one master's degree -- 22.5 percent of teachers who have less than five year's teaching experience have a master's degree in education and 5.6 percent have a master's in another field. Nearly one percent (0.8) have a doctorate in

TABLE 6: Academic Degrees Held by Public School Teachers: 1986

QUESTION: WHAT ACADEMIC DEGREES HAVE YOU RECEIVED? (CHECK ALL THAT APPLY)

	Total	Level		Years of Experience					
		Elem.	Sec.	0-4	5-9	10-14	15-19	20-24	25+
Base:	1,136	629	491	125	177	264	237	162	168
	%	%	%	%	%	%	%	%	%
Bachelor's in education...	74	80	66	82.2	83.5	94.7	70.5	66.0	69.8
Bachelor's in other field.	24	20	33	21.7	18.1	21.8	27.3	30.3	23.6
Master's in education.....	44	44	41	22.5	35.7	45.2	50.0	48.2	55.6
Master's in other field...	12	9	19	5.6	11.3	11.8	12.6	16.6	13.6
Doctorate in education....	1	1	1	0.0	1.7	0.7	0.8	1.1	1.1
Doctorate in other field..	1	*	1	0.8	2.2	0.3	1.2	0.5	0.0
Other, specify.....	14	14	15	12.0	9.0	9.9	15.5	16.6	15.9

NOTE: Percentages do not add up to 100 since some teachers have more than one degree.

* Less than 0.5

another field. Some of them appear to have two bachelor's degrees -- 82.2 percent of teachers with less than five years' experience have a bachelor's in education, and 21.7 percent have a bachelor's in another field.

Scholastic Aptitude Test Scores

Not only are more high school students who take the Scholastic Aptitude Test (SAT) saying they intend to major in education when they get to college, but their scores also are rising -- faster than the national average SAT scores. From 1973 to 1983, national SAT scores fell steadily, and those of students who indicated they might major in education when they got to college fell even more than the national averages. SAT scores turned upward in 1983, and the scores of intended education majors have been rising faster than the national averages. From 1983 to 1985, SAT verbal scores for intended education majors rose from 394 to 404, and their math scores rose from 418 to 432. The national verbal scores went from 425 in 1983 to 431 in 1985 and math from 468 to 475 in the two years.

The 1986 scores for all SAT-takers were the same as the 1985 scores -- 431 for verbal and 475 for math. The College Board did not collect the data by intended education majors for 1986.

Table 7: What's Most Important on a Job

QUESTION: IF YOU HAD TO CHOOSE, WHICH OF THESE ARE MOST IMPORTANT TO YOU ON THE JOB? (CHECK 2 OR 3)

	Teachers		All Employed	Teachers by Years of Experience					
	Publ	Priv	Adults/a	0-4	5-9	10-14	15-19	20-24	25+
Base:	1,132	446	967	123	177	263	238	162	169
	%	%	%	%	%	%	%	%	%
Chance to work with young people - see young people develop.....	62	75	not asked	71	66	62	58	62	57
A chance to use your mind and abilities.....	63	76	39	57	64	63	60	62	63
Appreciation of a job well done.....	54	60	40	50	48	51	51	60	54
A good salary.....	51	33	63	50	56	52	53	44	41
Job security.....	27	16	53	27	26	27	26	26	22
Medical and other benefits.....	16	11	36	12	20	14	15	18	14
A clean, quiet, comfortable place to work.....	12	11	19	14	9	9	13	13	12
Being able to retire with a good pension.....	10	2	20	3	5	4	11	16	25

/a A survey of 967 employed adults conducted by Louis Harris and Associates, Inc. for Business Week, May 20-June 2, 1985.

CHARACTERISTICS OF NEW TEACHERS

The following data come from the National Center for Education Information's survey of 1,592 public and private school teachers conducted February 7 to April 15, 1986 and reported here for the first time by years of teaching experience for the 1,114 public school teachers only. NCEI conducted an unpublished survey of teachers in fall 1985 having drawn the sample differently than for the survey reported here and in Profile of Teachers in the U.S. (NCEI, April 1986). When the responses to identical items from that earlier survey were compared with those of the teachers in the second survey, no significant differences were recorded on any item. When responses were analyzed by years of experience for each survey, there were no significant differences.

What's Most Important on a Job

People choosing to teach now are entering the profession for the reasons people have always given for going into this noble occupation: a chance to work with young people, to see young people develop, and to use their own minds and abilities. The newest teachers, more so than any other group, say working with young people is what motivates them most. Nearly three out of four teachers with less than five years' experience (71 percent) said the most important thing to them on the job was "a chance to work with young people -- see young people develop," and 57 percent said "a chance to use your own mind and abilities." "Appreciation for a job well done" tied for third with "a good salary" -- 50 percent of teachers with less than five years' experience selected these options when asked to check two or three out of eight things that are most important to them on the job. The overall workforce in America ranks "a good salary" first (63 percent) and "job security" second (53 percent). There are no appreciable differences in responses of teachers by how long they have been teaching or by their ages. Young people choosing teaching today are entering the profession for the same non-materialistic reasons people have always chosen occupations such as teaching. [,1]

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1. The National Education Association's 1981 survey of teachers showed that 69 percent of teachers said "a desire to work with young people" was the reason they were "presently" teaching. Other reasons were: "interest in subject-matter field" (39 percent) and "the value or significance of education in society" (37 percent). More than a third (37 percent) gave, as a reason for "presently" teaching, "the long summer vacation."

The 1985 Metropolitan Survey of the American Teacher reported 96 percent of teachers were in teaching because they "love to teach."

TABLE 8. Leave Teaching for More Money Elsewhere?

QUESTION: PLEASE INDICATE WHETHER YOU STRONGLY AGREE, SOMEWHAT AGREE, SOMEWHAT DISAGREE, OR STRONGLY DISAGREE WITH EACH OF THE STATEMENTS BELOW:

	Base	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree	Not Sure
		%	%	%	%	%
Given a choice between my teaching job and a job in another field that paid at least $2,000 more per year I WOULD KEEP MY TEACHING JOB						
Private	440	58	25	7	6	5
Public						
Total	1,135	42	28	12	11	7
By Years of Experience						
0-4	125	40	33	10	12	6
5-9	174	46	30	9	7	9
10-14	264	40	30	13	9	9
15-19	237	38	25	16	15	7
20-24	168	48	27	9	11	5
25+	167	47	24	10	12	7
By Age						
25-34	262	36	38	11	7	8
35-44	448	41	25	14	15	7
45-54	264	46	21	14	11	8
55-64	123	50	26	7	9	7
Given a choice between my teaching job and a job in another field that paid at least $5,000 more per year, I WOULD KEEP MY TEACHING JOB						
Private	442	32	30	18	14	7
Public						
Total	1,132	18	29	19	26	8
By Years of Experience						
0-4	125	20	30	20	26	4
5-9	176	17	33	22	19	9
10-14	263	16	25	22	27	10
15-19	235	18	25	18	29	10
20-24	167	21	30	20	22	7
25+	166	27	27	12	25	8
By Age						
25-34	263	13	33	26	21	7
35-44	449	18	25	17	30	9
45-54	260	21	25	16	28	10
55-64	123	27	25	17	22	7

Leave Teaching for More Money Elsewhere?

Teachers recently hired are not any more tempted to leave teaching for higher-paying jobs elsewhere than people who have been teaching for several years. When teachers in the NCFI survey were asked if they would leave teaching, if given the option of making $2,000 more per year in another job, around 70 percent in each of the experience categories said they would keep their teaching jobs. When given the option of a $5,000 a year increase in another job, around half of the teachers in each of the 5-year level-of-experience intervals said, "I would keep my teaching job." This is particularly significant for those who have recently entered teaching. A $5,000 increase represents a 27 percent salary jump for people who have less than five years' teaching experience, compared with a 17 percent increase for teachers with 25 or more years of experience.

Longer School Year?

Summers off seems to still be a lure for teaching. People who have less than five years' teaching experience are no more inclined to teach 12 months out of the year than are people who entered teaching several years ago. Eighty-four percent of teachers who have been hired in the last five years -- the same as for all public school teachers -- said they agreed with the statement, "Even if I could make more money teaching 12 months out of the year instead of 9 or 10, I'd rather teach just 10 months." If given the option of teaching 9 or 10 months and making more money doing other professional activities for the remainder of a 12-month-work-year, 78 percent of new teachers and 79 percent of all teachers in public schools said, "I'd still prefer a 9 or 10 month contract to a 12 month contract."

Job Satisfaction

New teachers actually report higher levels of overall job satisfaction than do veteran teachers. While a greater proportion of all teachers reports higher levels of satisfaction with the job/work they do than do college graduates generally (who, in turn report higher job satisfaction than the general worker), teachers with less than ten year's experience report the highest levels of satisfaction. More than 9 out of 10 (90.2 percent) of teachers with 5 to 9 years of experience, and 87.8 percent who have been teaching less than five years say they are satisfied with their jobs, compared with 80.9 percent of those with 15 to 19 years' experience, and 81.5 percent of the group with 20 to 24 years of experience.

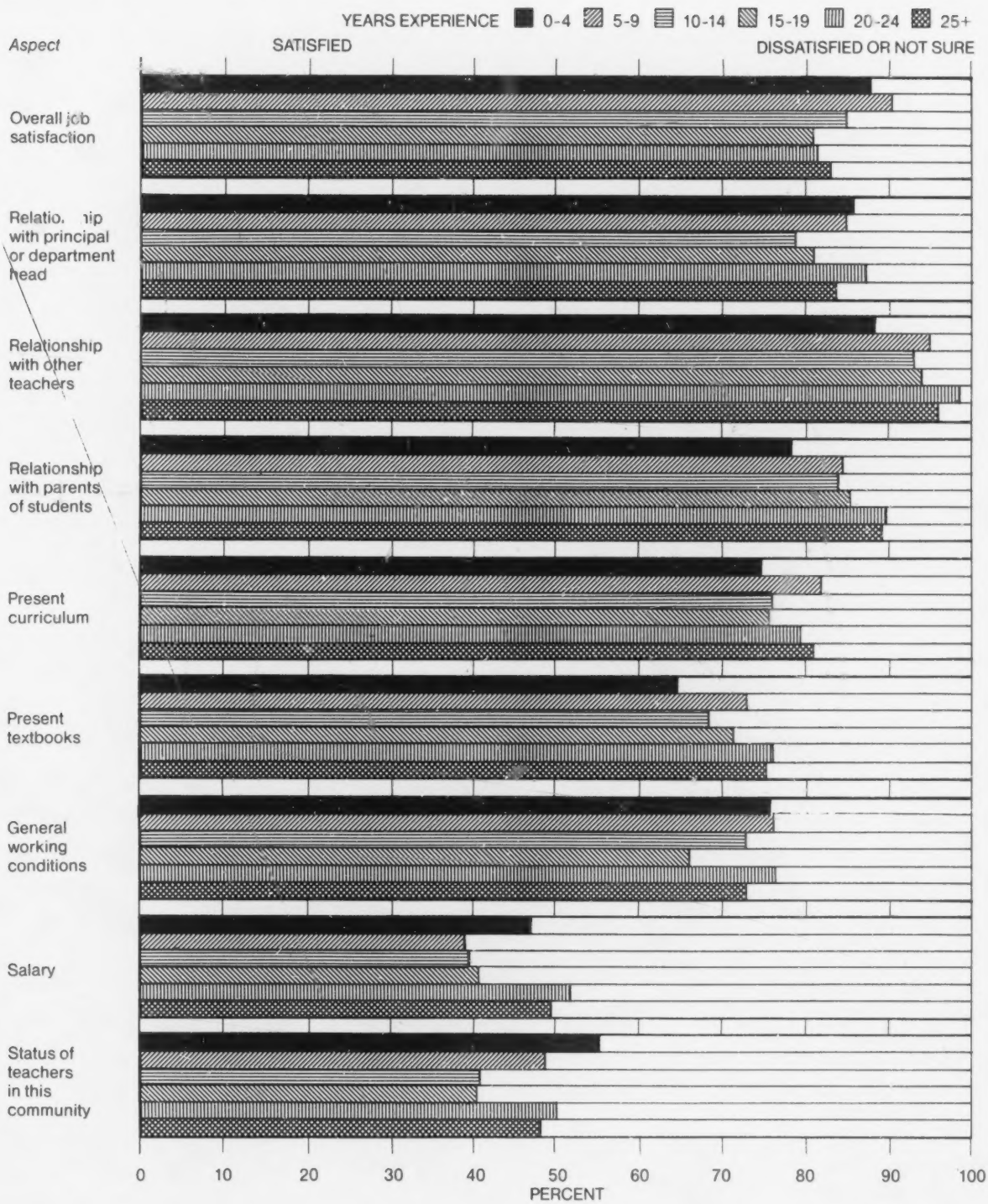
It is noteworthy that the newest teachers and those teaching 25 years or more report the <u>least</u> dissatisfaction with their salaries and the <u>most</u> satisfaction with their status in their communities and with their principal or department head.

Table 9: Longer School Year?

QUESTION: PLEASE INDICATE WHETHER YOU STRONGLY AGREE, SOMEWHAT AGREE, SOMEWHAT DISAGREE, OR STRONGLY DISAGREE WITH EACH OF THE STATEMENTS BELOW:

	Base	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree	Not Sure
		%	%	%	%	%
Even if I could make more money teaching 12 months out of the year instead of 9 or 10, I'd rather teach just 10 months						
Private	439	65	21	7	5	2
Public						
Total	1,135	65	19	6	8	2
By Years of Experience						
0-4	125	62	22	5	10	2
5-9	177	59	28	3	7	3
10-14	263	67	14	6	10	2
15-19	235	65	20	8	6	1
20-24	167	65	20	7	7	1
25+	168	65	13	8	11	3
By Age						
25-34	263	57	27	5	8	2
35-44	448	69	17	7	6	1
45-54	264	64	14	5	12	3
55-64	123	70	17	5	4	3
If I could make more money teaching 9 or 10 months and doing other professional activities for 2 or 3 months, I'd still prefer a 9 or 10 month contract to a 12 month contract						
Private	430	55	24	8	9	4
Public						
Total	1,132	55	24	8	8	4
By Years of Experience						
0-4	122	48	30	7	7	7
5-9	177	54	27	10	5	4
10-14	262	55	25	8	9	2
15-19	236	53	25	8	9	6
20-24	167	56	22	11	7	3
25+	168	66	16	7	8	3
By Age						
25-34	260	50	29	9	8	3
35-44	450	54	24	9	8	4
45-54	264	58	20	5	11	5
55-64	122	68	21	4	4	2

SATISFACTION WITH ASPECTS OF TEACHING



Main Purposes of Education Today

While teachers, regardless of how they are categorized, say the number one and number two purposes of education today are "to teach students reasoning and analytical skills" and "to help students develop sound character," there are differences among teachers in the emphasis given to each of these priorities. Teachers hired most recently tend to give greater emphasis to helping students develop sound character -- 66.1 percent of them checked it as one of the main purposes of education today compared with 57.8 percent in the group with 15 to 19 years of experience, and 59.7 percent of those teaching 25 years or more. On the other hand, 92.8 percent of teachers who have 15 to 19 years' experience and 84.6 percent in the most experienced group, compared with 73.3 percent of teachers with less than five years' experience, rated teaching students reasoning and analytical skills as the main purpose of education today.

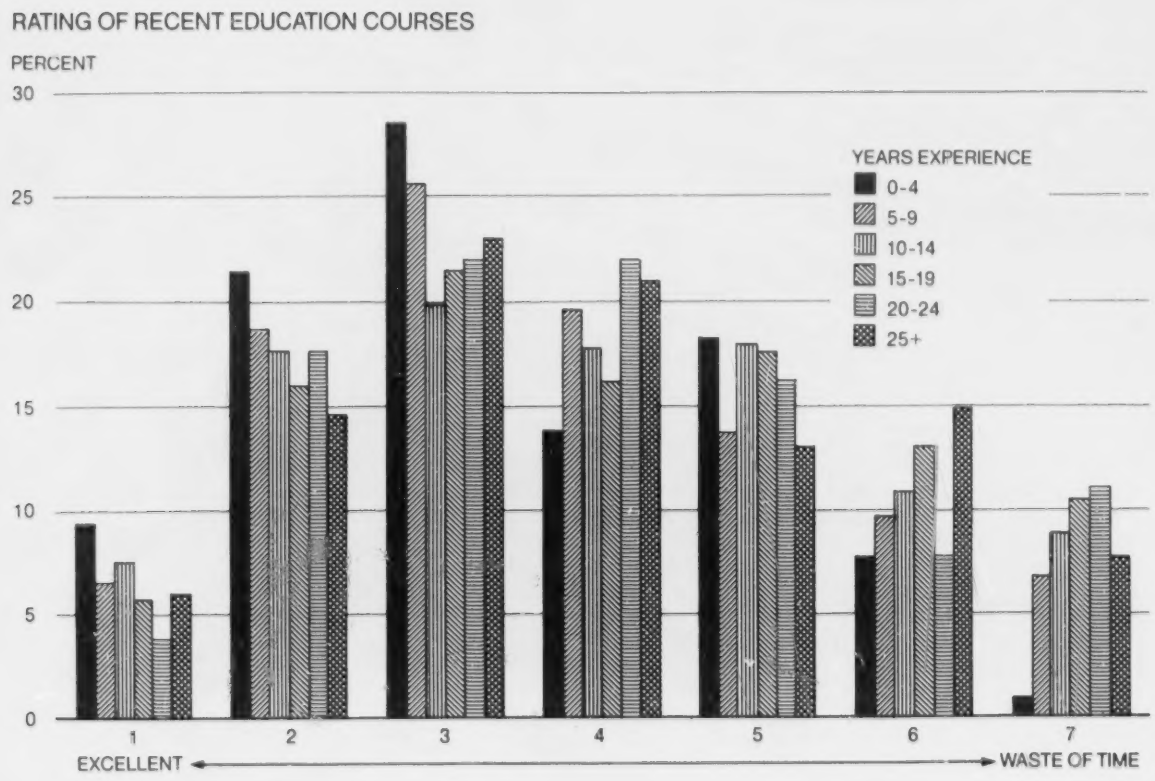
Table 10: Main Purposes of Education

QUESTION: IN YOUR OPINION, WHAT ARE THE MAIN PURPOSES OF EDUCATION TODAY? (CHECK 2 OR 3) (Listed in order of highest priority, not in order asked)

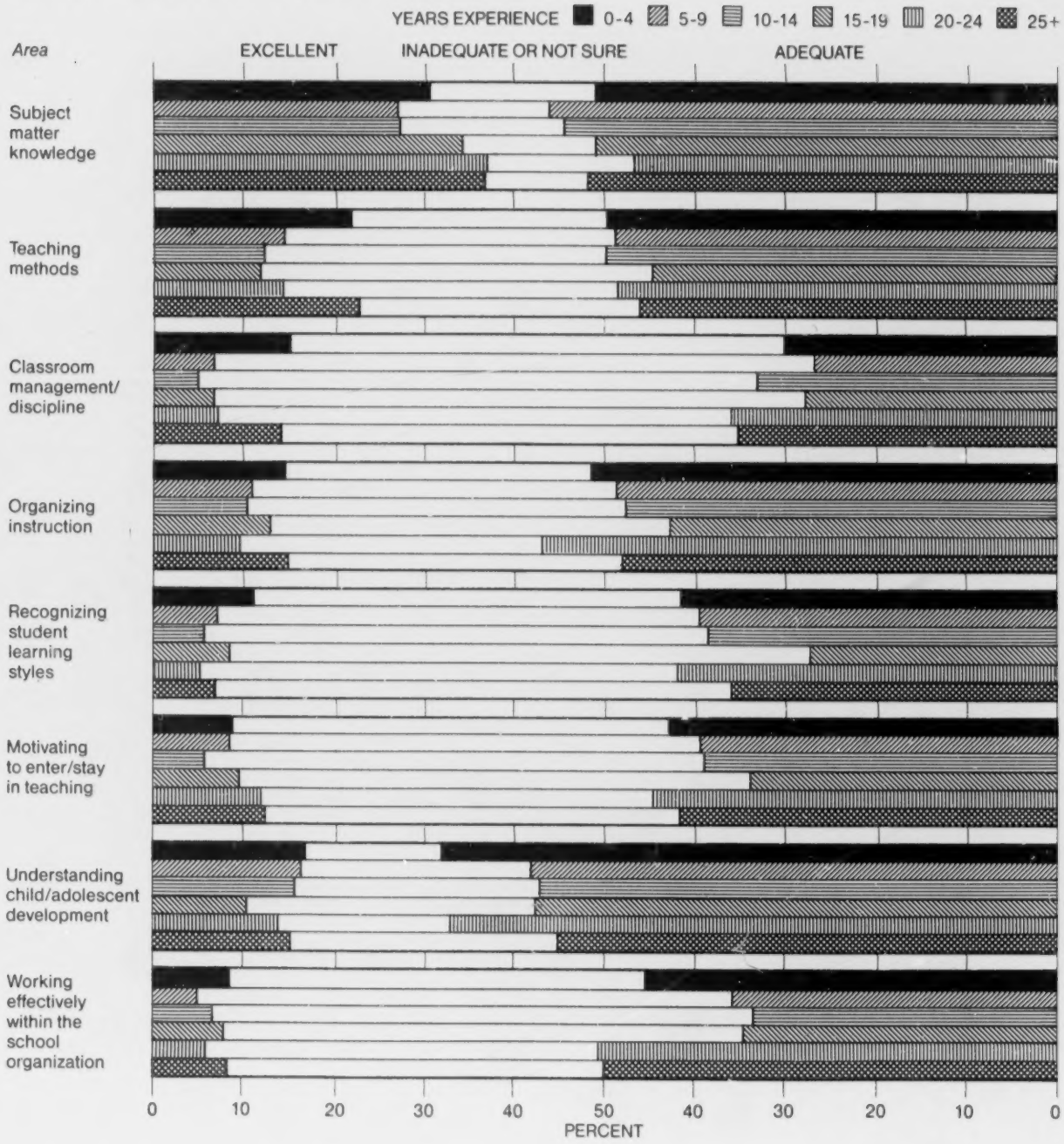
	Total	Years of Experience					
		0-4	5-9	10-14	15-19	20-24	25+
Base:	1,144	124	177	260	237	168	169
	%	%	%	%	%	%	%
To teach students reasoning and analytical skills.....	84	50.0	46.3	51.5	49.7	51.1	44.9
To help students develop sound character.....	62	38.7	36.7	38.0	35.0	41.6	34.9
To instill sound morals and ethical principles in America's youth.....	40	73.3	84.7	82.6	92.8	83.9	84.6
To prepare students for college.....	37	66.1	64.9	61.1	57.8	60.1	59.7
To teach students job skills.....	49	41.9	36.1	36.1	30.3	52.3	49.1
To help students stay out of trouble with the law.	1	1.6	1.1	1.5	0.8	1.7	1.1
Other.....	9	8.0	9.6	8.8	9.2	8.9	4

Academic Preparation for Teaching

Newly hired teachers rate the courses they have taken in education within the last five years a lot higher than do their more experienced colleagues. Well over half (59.3 percent) of teachers with less than five years' experience rated their recent education courses 1, 2 or 3 on a 7-point "Excellent" to "A waste of time" scale, with nearly a third of them (30.9 percent) giving these courses a 1 or 2. This compares with 43.2 percent of those teaching 15 to 19 years who rated the courses in education they have taken in the last five years 1, 2, or 3, and 21.8 percent who gave them a 1 or 2.



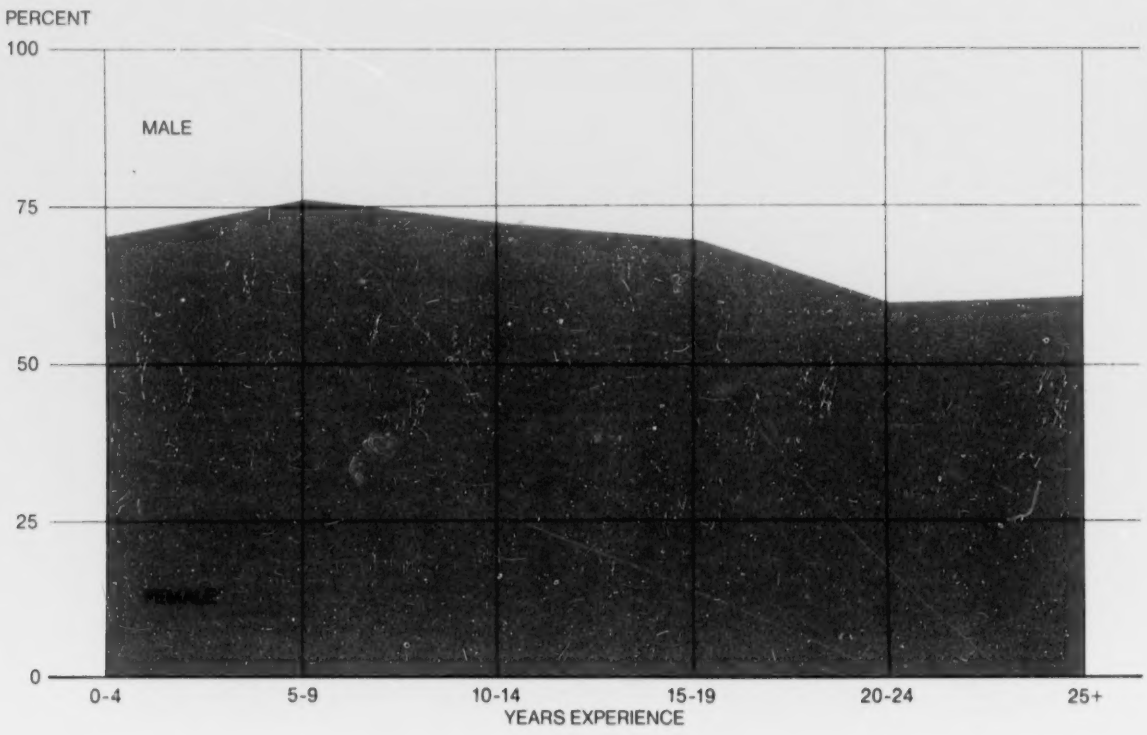
RATING OF COLLEGE PREPARATION FOR TEACHING



Sex

A greater proportion of new teachers are women than the overall proportion of teachers who are women. Seventy-one percent of teachers with less than five years' teaching experience are women, compared with 69 percent of all teachers and 59 percent of those with 25 or more years of teaching. This may dispel some of the myth that women are fleeing to careers other than teaching. Many women <u>are</u> choosing other professions, but there are a lot more qualified women to go around. Women now constitute more than half of college enrollment (51 percent) and have gone in numbers from 3-million in 1970 to about 6 million in 1985.

SEXUAL DISTRIBUTION OF TEACHERS



Race

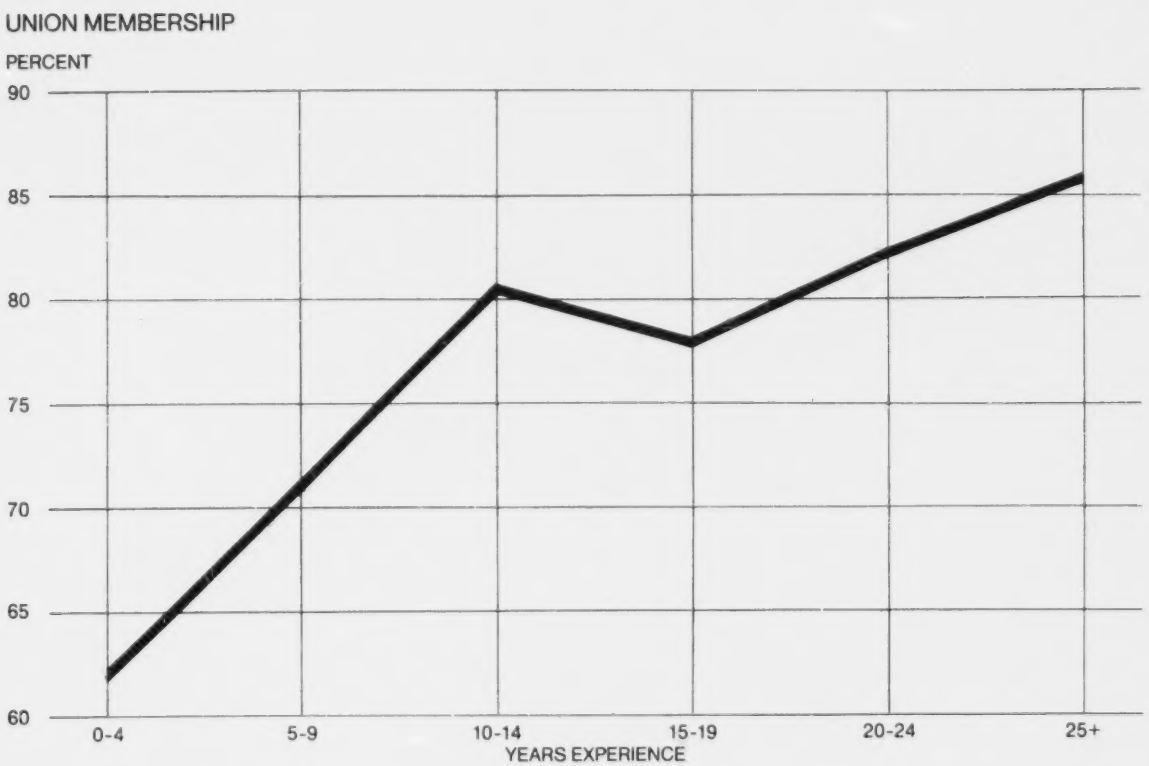
There is no question that the proportion of teachers who are minority is much smaller than the proportion of minority students. The percentage of minority students is about 27 percent and climbing. The percentage of minority teachers is about nine percent and falling. While 9.5 percent of teachers with 25 or more years' experience and 7.8 percent with 20 to 24 years teaching are black, only about five percent of those with less than 20 years experience are black. Teachers with less than five years' experience are 4.9 percent black, compared with 4.5 percent of those with from five to 20 years' teaching experience. The proportions of teachers who are Asian and who are Hispanic, however, are greater for more recently hired teachers. The group with less than five years' experience is 3.2 percent Hispanic and 1.6 percent Asian, compared with 1.9 percent Hispanic and 0.6 percent Asian for the entire public school teaching force.

TABLE 11. RACIAL COMPOSITION OF PUBLIC SCHOOL TEACHERS: 1986

		Years of Experience					
Race	All	0-4	5-9	10-14	15-19	20-24	25+
White	91.3	90.1	92.0	92.7	93.6	86.6	86.9
Black	6.0	4.9	4.5	4.5	4.6	7.8	9.5
Hispanic	1.9	3.2	2.2	1.1	0.8	4.2	1.1
Asian	0.6	1.6	0.5	0.7	0.4	0.6	1.1
Indian	0.6	0	0.5	0.7	0.4	0.6	1.1

Union Membership

On no variable do people who have become teachers recently differ more from their veteran colleagues than on membership in a union. While only 14.3 percent of teachers who have 25 or more years as teachers say they do not belong to either teacher's union, 37.9 percent of teachers with less than five years' experience say they do not belong to either the National Education Association or to the American Federation of Teachers. This is very much in line with union membership trends in this country. Union membership of the overall workface in America has dropped from an all-time high of 35.5 percent in 1945 to 18.8 percent in 1984. Only 12 percent of college graduates employed full-time, year-round belong to a union today. Teaching is currently the most unionized occupation in the country. Eighty percent of teachers in public elementary and secondary schools and 12 percent of those in private schools belong to a union.



Chapter 3: Certification

At the onset of World War II, Winston Churchill confessed he was baffled by the duplicity of the Soviet Union in aiding and abetting Nazi Germany. He said the Soviet to him was "a riddle wrapped in a mystery inside an enigma." Anybody who has plumbed the confusions of how America certifies its teachers, as many have, could accurately apply Churchill's colorful phrase to that process.

The way our teachers are certified cries out for reform. It could be argued that nothing concerning teaching in America is more in need of reform. And any genuinely effective changes would have to start with determining what kind of certificates our teachers are teaching with, along with whether the certificates they hold really qualify them to teach.

As a generality, it might almost be said that nobody today has the answers to both questions. Small wonder, for trying to hit on what certification of teachers is amounts to shooting at a moving target. The criteria for certification are numerous and cumbersome, they are changing all the time, and they vary considerably from state to state.

Further, the confusion has been compounded in recent years. The states, responding to pressures to raise standards for entry into teaching, introduced additional criteria for certification -- on top of the teetering pile of criteria that already existed. Thus, the process by which to become a teacher was made woefully discouraging to all but the hardiest. And, yet, more and more men and women are getting full certification to teach.

Much of the data on teacher certification, including reams of statistics provided by sources perceived as unimpeachably authoritative, cannot withstand close scrutiny. For example, some states that reported rather large proportions of teachers working on emergency certificates two years ago are saying now they do not issue emergency certificates at all. Instead, they say, they provide warrants, provisional certificates, temporary certificates, or some other, similarly named documentation to permit teaching by those failing to meet all requirements for full certification. When they do fully qualify, they become eligible for a "regular" or "full" certificate, or whatever the state calls its official finding that a teacher is fully

TABLE 12. State Semester Hour Course Requirements For Teacher Certification

State	ELEMENTARY Gen.	ELEMENTARY Prof.	ELEMENTARY Clin.	SECONDARY Gen.	SECONDARY Prof.	SECONDARY Clin.	SPECIAL ED. Gen.	SPECIAL ED. Prof.	SPECIAL ED. Clin.
Alabama	60	- 72 -		60	- 80 -		60	- 75 -	
Alaska	----------approved program----------								
Arizona	45	- 24 -		45	- 22 -		45	- 18 -	
Arkansas	48-50	18	6	48	18	6	48-50	18	6
California	§84	12	12	varies	12	12	varies by specialty		
Colorado	----------approved program----------								
Connecticut	75	24	6	45	12	6	NS	NS	NS
Delaware	60	45	6	60	15	6	60	39	6
Dist. of Columbia	NS	NS	6	NS	NS	6	NS	NS	6
Florida	21	14	6	12-30	14	6	15-32	12	6
Georgia	38	12	9	38	12	9	38	12	9
Hawaii	----------approved program----------								
Idaho	42	24	6	20	50	6	NS	30	6
Illinois	----------not available----------								
Indiana	70	21	9	40	49-65	9	40	65	9
Iowa	----------not specified----------								
Kansas	---approved program---transcript analysis--								
Kentucky	45	32	*	45	25	*	45	42	*
Louisiana	46	30	9	46	27	9	46	27	9
Maine	60	24	6	60	12	6	60	18	6
Maryland	80	26	8	24	18	6	NA	33	6
Massachusetts	**	21	300C	**	21	300C	**	33	150C
Michigan	----------approved program----------								
Minnesota	--approved program--full-time student teaching--								
Mississippi	42	54	6	42	21	6	42	21	6
Missouri	60	50	10	60	55	10	60	60	15
Montana					24				
Nebraska	***								
Nevada	88	21	15	36	87	14	50	77	NA
New Hampshire	----------competency-based----------								
New Jersey	30	200C	1yr	30	200C	1yr	18	15	8*
New Mexico					66				
New York	0	24	NS	0	12	NS	0	24	NS
North Carolina	---does not use course/hour requirements---								
North Dakota	-	20	9	-	20	9	-	20	9
Ohio	----------not available----------								
Oklahoma	50	18-20	10-12	50	18-20	10-12	50	18-20	10-12
Oregon	40	24	10	40	24	10	40	30	10
Pennsylvania	--------does not count course hours--------								
Rhode Island	----------not available----------								
South Carolina	----------not specified----------								
South Dakota	50	72	6	AP	18	6	AP	AP	6
Tennessee	27	20	6	40	20	4	40	40	6-8
Texas	----------not available----------								
Utah	32	28	8	28	27	8	32	18	8
Vermont	----------competency-based----------								
Virginia	48	12	6	48	12	6	48	12	6
Washington	****		8wks	****		8wks	****		8wks
West Virginia	40	20	4wks	40	20	4wks	40	20	4wks
Wisconsin	40-44	26	5	40-44	18	5	40-44	38	5
Wyoming	----------not available----------								

NS -- not specified NA -- not available
AP -- approved program C -- clock hours

* Kentucky requires 150 clock hours clinical experience plus 12 weeks student teaching for elementary and secondary candidates and 200 clock hours clinical experience plus 12 weeks student teaching for special education candidates.

** Massachusetts requires a "sound arts and sciences program" in general studies.

*** Nebraska requires of all teaching candidates that general studies comprise one-fourth to one-half of the total B.A. program and that professional studies comprise one-sixth. The clinical experience requirement is 240 clock hours.

**** Washington requires of all teaching candidates that general and professional studies meet the "minimum generic standard" and require eight weeks of student teaching.

SOURCE: The National Center for Education Information, Teacher Certification Survey, 1985

qualified to teach in its schools for a given period of time.

The criteria for certification to teach often have little to do with demonstrated competence to teach. It is quite conceivable that a person who is teaching on a so-called "emergency certificate" may be better qualified academically and a better teacher, too, than someone who has cleared all the obstacles to get a full teaching certificate.

Because criteria vary enormously from state to state and within states, a teacher can be certified to teach in one state but not in another, whether neighboring or across the country. Perhaps this is why teaching is such a provincial occupation. The National Center for Education Information (NCEI) survey of teachers this year showed two-thirds of public school teachers work within 150 miles of where they were born.

Another problem involves discrimination between what some states call "generic" certificates, and "specific" certificates. For example, a state's "generic" certificate may be for teaching any history in high school, while another state may issue certificates in specific areas of history. A teacher could get certified to teach American history but not European history, and, if that teacher wound up teaching a course in European history, he or she would be counted as teaching "out of field" and therefore are not fully qualified to teach that subject.

The overriding question is this: What good is a teaching certificate under the current systems anyway? Does having a full teaching certificate mean one is qualified to teach? Few dispute anymore that an accumulation of education courses in college does not a great teacher make. Yet, that is still the primary basis for certification of teachers in this country.

Emergency Certificates

Nobody knows exactly how many teachers are teaching on emergency certificates, and that is a fact. The issue is made even more mysterious by the fact that "emergency certificate" means different things to different people. Some states report they don't even issue emergency certificates at all any more. Rather, they issue a "warrant," or a "provisional," or a "probationary" certificate to people who do not meet all of the state's requirements for a regular certificate to teach. Some state's issue more than one of these "less-than-full" certificates to different people who lack certain types of requirements. Regardless of what a state calls its pieces of paper that allow people to teach until they meet all of the state's certification requirements, state directors of teacher certification say the incidence of people teaching completely out-of-field, e. g., an English teacher teaching science, rarely ever happens and that very often a teacher not fully certified may lack only a college course or two for a full certificate.

NATIONAL CENTER FOR EDUCATION INFORMATION TEACHER CERTIFICATION SURVEY

AUTHOR'S NOTE:

NCEI has been trying to get an accurate picture of teacher certification for the last three years. In the summer of 1986, we surveyed the State Directors of Teacher Education and Certification in each of the 50 states and the District of Columbia. We asked questions concerning numbers of regular teaching certificates issued in each of the last four years, proportions of persons who get certified to teach who actually wind up teaching, turnover rates, emergency certificates, whether or not supply is keeping up with demand now and projected five years from now and what the state is doing about providing alternative routes for certification to teach.

This fall I personally called the state offices of teacher education and certification after we had received the written responses to clarify and validate the responses mailed in. My analysis, based on our own data-collection efforts and those of others, is that most states simply do not keep the information in a reliable, easily retrievable way.
What follows is a description of what the states reported to NCEI in fall 1986.

ALABAMA

9,535 initial regular teaching certificates were issued in 1985-86. Approximately 70 percent of those issued regular certificates got full-time jobs teaching. Only about 135 emergency certificates were issued in 1985-86 (0.4 percent of the total teaching force of 36,913 in the state). Emergency certificates will no longer be issued. Instead, temporary and provisional certificates are being issued starting this fall, and about 150 of those are expected to be issued in 1986-87.

Alabama reports the demand for teachers is not exceeding supply at the pre-primary and elementary school levels and, that at the secondary level, it's really unknown and varies from county to county and then is probably only in science, math, foreign languages and learning disabilities. The state says shortage projections five years from now are sheer speculation.

ALASKA

Alaska could not report how many teaching certificates it issues. The state did say it has about three percent of its teachers on emergency certificates. Alaska employed 6,213 teachers in 1985-86. The state reports no shortages, except "maybe" in math, science and special education.

ARIZONA

The state told us most of the data we were seeking were not collected and that it was not experiencing a demand for teachers greater than supply.

ARKANSAS

An estimated 2,037 regular teaching certificates were issued in 1985-86, 2,358 in 1984-85 and 2,157 in 1983-84. The state estimates 95 percent of those issued certificates wind up teaching. It reports about three percent of its 23,699 teachers in 1985-86 were on emergency certificates, and the state reported that proportion is not growing. No shortage data was available.

CALIFORNIA

10,633, 8,364 and 12,115 initial regular certificates were reportedly issued in the years 1984-85, 1983-84 and 1982-83, respectively. California reports about 80 percent of people issued regular certificates get full-time teaching jobs. It's annual turnover rate is about six percent. About 2.7 percent of its 175,135 teachers in 1984-85 taught on emergency certificates. The state estimates about 2.5 percent of its teachers this 1986-87 school year will be on emergency certificates.

California reports it is not experiencing a demand greater than supply at any level right now but expects it will at the elementary level five years hence.

COLORADO

3,869 regular teaching certificates were issued in 1984-85, 3,540 in 1983-84 and 4,214 in 1982-83. The state doesn't know how many of these people wind up teaching, says its annual turnover rate is about 10 percent and that only about 0.9 percent of its 28,818 teachers in 1985-86 were on emergency certificates and that the number is not growing. Colorado reported it is not experiencing a shortage of teachers and won't be five years from now.

DELAWARE

Does not collect information about numbers of certificates issued to out-of-state candidates, therefore does not know for sure how many total certificates it issues. However, the state issued 140 initial regular certificates to persons who graduated from approved teacher education programs in the state in 1986, 147 in 1985, 197 in 1984 and 185 in 1983.

Delaware reports about 85 percent of those to whom it awards regular certificates get teaching jobs and that its annual turnover rate is about 10 percent and not changing. The state says its proportion of teachers on emergency certificates has been about one percent for the last four years and is not increasing. Delaware employed 5,745 teachers in 1985-86. It says it needed approximately 200 math, physics, chemistry, and special education

teachers at the secondary level more than it had in fall 1986. The state projects shortages only at the secondary levels and then only in specific subjects five years from now.

FLORIDA

Issued approximately 17,000 initial regular certificates in each of the last three years, two-thirds of which went to persons who came from out-of-state. Florida couldn't say how many people it gives teaching certificates to actually go on to teach. Its annual turnover rate is an estimated 10 percent.

Florida does not issue emergency certificates. It issues temporary certificates and will give one to anybody who has a bachelor's degree and applies for a certificate to teach. These persons then have to go through Florida's Beginning Teachers' Program. The state reports approximately 2,500 of its approximately 90,000 teachers this school year (1986-87) are on temporary certificates.

The state's office of certification says supply of teachers is keeping up with demand except in math, science and special education at the secondary level. It does not anticipate a shortage of teachers five years from now.

GEORGIA

5,079, 5,089, 5,089 and 4,976 regular teaching certificates were reportedly issued by the state in 1986, 1985, 1984 and 1983, respectively. The state says 98 percent of those to whom it awards certificates go on to get teaching jobs and that its turnover rate in each of the last four years was: 6.5 percent in 1983, 6.4 percent in 1984, 6.2 percent in 1985 and 6.0 percent in 1986.

Georgia reports an array of different types of certificates issued to people who apply to teach but don't meet all the state's full-certification requirements. "Provisional" certificates are given to people who have a liberal arts degree but lack the requisite education courses. These are issued annually for a maximum of three years during which time the person holding one must take a minimum of 10 quarter hours of college course work annually to complete the professional education sequence required by the state. "Probationary" certificates are given to people who are teaching "out of field" -- meaning the person lacks some courses in subject-matter (as opposed to education-methods courses) required by the state in the field in which the teacher is teaching. These people have to take a minimum of 10 quarter hours annually and have five years in which to take all the content courses the state requires for full certification to teach in that specific field. The state reported it issued 987 "Provisional" and 3,083 "Probationary" certificates in 1984-85 and 1,199 "Provisional" and 3,210 "Probationary" certificates in 1985-86. Georgia employed 57,370 teachers in the latter year.

The state reported that demand for teachers exceeded supply this year by 150 at the pre-primary levels, 500 at elementary and 3,200 in secondary schools and that demand will exceed supply at all three levels five years hence.

Georgia reports its State Board has modified legislation to accommodate critical needs areas providing an alternate route to persons who already have a bachelor's degree. The state is also changing the way people are certified at the master's degree level. People getting a Master's in Education or a Master of Arts in Teaching no longer are required to have a professional education bachelor's degree provided they have a bachelor's in the content area to be taught.

HAWAII

690 regular certificates were reportedly issued in 1985, 645 in 1984 and 628 in 1983. The state estimates 78 percent of those awarded full certifcates get teaching jobs. It reports it needed 100 teachers to meet its demand in science, math, school counseling and special education at the secondary level this year and that it is expecting to have shortages at all levels five years from now.

IDAHO

The person in the state teacher education and certification office who responded to our survey said data about numbers and types of teaching certificates are not available and that Idaho does not issue emergency certificates and that the state is experiencing a demand for teachers exceeding supply only in science, math and foreign languages at the secondary level.

ILLINOIS

8,467 regular teaching certificates were reportedly issued by the state in 1986, 8,278 in 1985, 8,126 in 1984 and 8,744 in 1983. It estimates about 45 percent of those to whom it awards regular teaching certificates got full-time teaching jobs and that its turnover rate for teachers has gone from 7.6 percent in 1983 and 1984 to 6.9 percent in 1985 to 6.7 percent in 1986. The respondents to our survey said Illinois does not issue emergency certificates but does give temporary provisional certificates and that the number of teachers in each of the 1st three years teaching with temporary provisional certificates has been less than 0.1 percent of all full-time teachers in the state. Illinois employed 100,051 teachers in 1985-86.

INDIANA

The state issued 5,097 regular teaching certificates in 1985 -- up from 4,307 in 1984 but down from 5,297 in 1983. It estimates 90 percent of its certificate-holders get jobs teaching and says its annual turnover rate has gone from eight percent in 1983 and 1984 to seven percent in each of the

following two years.

Indiana reports that less than half of one percent of its teachers taught with emergency certificates in the school years 1983-84 and 1984-85, 0.8 percent in 1985-86 and 0.5 percent are projected in 1986-87. The state employed 50,001 teachers in 1985-86. It reports no shortages except in secondary mathematics, science, foreign languages and special education and does not anticipate shortages in the near future.

KANSAS

4,486, 3,678 and 4,363 regular teaching certificates were issued in the fiscal years 1985, 1984 and 1983, respectively. Kansas reports that data about turnover rates and the proportion of people who get certified to teach and wind up getting jobs teaching are unavailable and that it does not issue emergency certificates. Kansas employed 26,660 teachers in 1985-86 and says shortages exist only in certain areas and in certain subjects -- mathematics, science and foreign languages.

LOUISIANA

2,621 regular certificates were awarded to prospective teachers in 1985-86, 2,375 in 1984-85 and 2,781 in 1983-84. The state's teacher education and certification office reported that 421 out of 42,060 teachers (0.1 percent) in 1983-84 were on emergency certificates, 291 out of 42,638 (0.7 percent) were in 1984-85 and 229 of the 42,900 teachers (0.5 percent) in 1985-86 taught with emergency certificates. The state says demand for teachers exceeds supply at the secondary level in mathematics, science, foreign languages and English and that it anticipates shortages at all levels five years from now.

MARYLAND

The state's certification office says data prior to 1985 are not very reliable and that the number of certificates issued in 1985 was 1,963 and in 1986, 2,265. The state gives provisional certificates but not emergency certificates. In 1985-86 the "number of teachers in state certified professional staff at the school level was 43,391. Of these, 481 (1.1 percent) had a provisional certificate. This figure includes some non-classroom instructional staff but not school counsellors."

Maryland reports demand for teachers exceeds supply at the pre-primary, elementary and secondary levels and that the total number needed, as of August 1986 was 778.

MASSACHUSETTS

The respondent to our survey said his state office of certification has had "very little contact with schools concerning these data... just installed a computer system." He reported the state issued 3,800 regular teaching

certificates in 1986 and estimated that only 25 percent of those to whom it awarded those certificates got full-time jobs teaching. Less than one percent of the states' teachers are on emergency certification.

Massachusetts says it is not experiencing a demand for teachers greater than supply now but may in the future.

MICHIGAN

4,100 people were issued regular teaching certificates in 1986, 4,000 in 1985, 5,000 in 1984 and in 1983. The state estimates that less than one percent of its nearly 79,000 teachers are on emergency certificates. The person responding to our survey reported, "We do not as yet have a shortage of teachers whose certificates allow them to teach in these areas. There may, however, be a shortage of 'highly qualified' teachers.... If the early retirement program has the impact that many believe it will, there could be a serious undersupply of teachers within the next five years. At this time, we are not able to predict this shortage."

MINNESOTA

Would have to do extensive research to come up with accurate figures on numbers of certificates issued and proportions of teachers on emergency certificates. The state did report that it estimates 47.2 percent of those to whom it awarded regular certificates in 1985 got full-time jobs teaching. Minnesota reports supply is keeping up with demand.

MISSISSIPPI

The state reported two different sets of numbers for how many initial regular certificates it issued in each of the last four years. A note from the supervisor of Teacher Education, Certification and Placement said about 1,000 new teachers are employed annually and that about 400 (40 percent) are people who graduated from teacher education programs the previous year, another 400 (40 percent) are people who graduated one to five years ago, 100 (10 percent) who graduated from teacher education programs six to 10 years ago and another 100 (10 percent) who graduated more than 10 years ago.

Approximately three percent of the state's 25,000 teachers are on emergency certificates. The state reports a shortage of 75 elementary school teachers and 100 secondary teachers in the fields of chemistry, physics, mathematics and foreign languages.

MISSOURI

The state issued 3,299 regular teaching certificates in 1985, 3,639 in 1984 and 3,695 in 1983. No hard data were available on how many people issued certificates actually go on to get teaching jobs, but the certification official responding to the NCEI survey said they estimate about 60 percent. The state does not issue emergency certificates. Rather, it gives temporary

certificates to those people who lack a few of the criteria for full certification.

No shortages are reported at the elementary level, and the respondent said it was "possible" supply was not keeping up with demand at the secondary level in math and science. The state "simply does not know at this point" if it will be experiencing a shortage of teachers five years from now.

MONTANA

The director of Teacher Education, Certification and Staff Development reported the state issued 1,448 regular teaching certificates in 1985 and hardly any other hard data but did state, "I have completed as much as I can of your survey with the information we have. Because of repeated cutbacks in staff and resources, we have been unable to update or continue any of our supply and demand activities."

On the issue of emergency certification, an attached statement read, "During the past few years, you have referred to emergency certificates. In Montana, we have an emergency authorization of employment which allows school districts to hire unqualified people if they are unable to find a certified teacher. We also have a provisional certificate that indicates minor deficiences such as failure to gain recent credits and failure to complete a K-12 program. We do not see this as an emergency certificate, but rather a means to accommodate those people trained under a different set of regulations in another state."

NEBRASKA

An estimated 1,900 regular certificates were issued in 1986 and in 1985, 1,746 in 1984 and 1,826 in 1983. Approximately 70 percent are thought to have gotten teaching jobs. The state reports about 0.05 percent of its 17,574 teachers are teaching on emergency certificates and that supply is keeping up with demand now and is expected to in the next five years.

NEVADA

580, 480 and 490 initial regular certificates were issued in 1986, 1985 and 1984, respectively. The state estimates 95 percent of those to whom it awards certificates to teach get teaching jobs and that its turnover rate is five percent. Nevada's respondent to our survey reported about one percent of the state's teachers were on emergency certificates in 1983-84 and in 1984-85 and that it was zero in the last two years. He did not specify whether the number dropped to zero because they don't have any teachers on emergency certificates or if they quit issuing emergency certificates.

Nevada reported needing 75 to 100 secondary teachers in special education, math, science and English.

NEW HAMPSHIRE

About 1,706 regular teaching certificates were issued in 1985, 1,709 in 1984 and 1,926 in 1983. The state estimates 70 percent of people holding full teaching certificates go on to teach. Its annual turnover rate is reportedly five percent and steady. Less than one percent of its 10,497 teachers last year were teaching on emergency certificates.

The state reported demand exceeds supply by 60 secondary teachers in math and science and anticipates supply will keep up with demand five years from now except at the secondary levels.

NEW JERSEY

3,024 regular teaching certificates were issued in 1985-86 -- 86 to people who went through the state's new alternate route. In 1984-85, 2,960 regular certificates were issued and 3,969 in 1983-84. The state reports an annual five percent turnover rate that has been steady for the last four years.

New Jersey is not reporting shortages now and does not anticipate any five years from now.

NEW YORK

19,152 regular teaching certificates were issued by the state in 1985 and 19,710 in 1984. The respondent to our survey noted "a computer problem left us with no data (for 1983).... 1986 data will not be ready until March 1987."

New York reports 2.6 percent of its 169,700 teachers in 1985-86 were teaching with emergency certificates. The respondent to our survey said supply was keeping up with demand for teachers state-wide and that shortages may exist five years from now.

NORTH CAROLINA

4,214 regular certificates were issued to prospective teachers in 1984-85 and 4,795 in 1983-84. The state says 34.7 percent of those to whom it awarded certificates in 1984-85 and 32.2 percent in 1983-84 got full-time teaching jobs. The annual turnover rate in 1982-83 was resportedly 7.6 percent, 6.9 percent in 1983-84 and 7.1 percent in 1984-85.

Approximately 160 emergency certificates were issued in 1985-86. The state is changing its emergency certification rules.

North Carolina reported supply is keeping up with demand except maybe in the physical sciences, math and foreign languages at the secondary level.

NORTH DAKOTA

1,222 teaching certificates were issued in 1986 and 1,025 in 1985. The state estimates 90 percent of those awarded teaching certificates got teaching jobs in 1983, 80 percent in 1984, 70 percent in 1985 and 65 percent in 1986. It says its turnover rate has gone from eight percent in 1983 to six percent in 1984, to five percent in each of the last two years. Less than one percent of its teachers taught with emergency certificates in any of the last four years.

North Dakota is not reporting shortages and does not anticipate that it will have any five years hence.

OHIO

5,499, 5,190, 5,357 and 5,618 initial regular certificates were issued to graduates of approved teacher education programs in the state of Ohio in 1986, 1985, 1983, respectively. The respondent of our survey added, "We issue approximately 5,000 certificates per year to individuals who come from out of state. These include beginners and experienced teachers." The state estimates 58 percent of its own graduates to whom it issued regular certificates got full-time jobs in 1985 and in 1986. The estimates for 1983 were 26 percent and for 1984, 43 percent. The person filling out our survey added, "The following figures indicate the percentage of vacancies filled by beginners: 1983 - 25%, 1984 - 29%, 1986 - 36%."

The state reports supply is keeping up with demand.

OREGON

2,808, 2,738 and 2,549 regular teaching certificates were issued in 1985, 1984 and 1983, respectively. The state estimates 51 percent in 1985 and 48 percent in 1984 got teaching jobs. The turnover rate for teachers in Oregon is a reported six percent.

The number of emergency certificates issued was 190 in 1983-84 (0.8 percent of all teachers employed in the state), 134 (0.5 percent) in 1984-85 and 77 (0.3 percent of the 25,205 teachers in 1985-86).

Oregon is not experiencing a shortage of teachers and is not anticipating shortages five years from now. A note attached to the NCEI survey stated, "Physical science (chemistry, physics) and advanced mathematics have been identified by the Oregon Teacher Standards and Practices Commission as 'shortage fields', but production of teachers in Oregon institutions exceeds the demand in public schools." A report from the office showed that twice as many people were issued full certification to teach these subjects last year than there were teachers in Oregon teaching advanced mathematics and physical sciences.

PENNSYLVANIA

10,229, 9,296 and 9,690 full teaching certificates were issued in Pennsylvania in 1985-86, 1984-85 and 1982-83, respectively. The state estimates only about 42 percent of teachers trained within the state wind up teaching in Pennsylvania.

In 1985-86, 3,163 of the state's 118,239 teachers were on emergency certificates, approximately 2,000 of whom were in Philadelphia alone. Pennsylvania counts both part and full-time teachers and long-term substitutes in its emergency certificate count.

Pennsylvania reports supply is keeping up with demand and will continue to do so, except, as the spokesperson from the state said, "We keep hearing there's a shortage of math and science teachers, but it is not showing up in emergency requests."

RHODE ISLAND

Numbers generally not available from the Department of Education. Turnover rates low, emergency certificates about 0.2 percent of total teachers (8,755 in 1985-86). No shortages and none anticipated.

SOUTH CAROLINA

3,891 regular teaching certificates issued in 1985 -- up from 2,214 in 1984. The state estimates 51 percent of these people get teaching jobs. The respondent to the NCEI survey noted, "The annual attrition rate is higher than for a longer period of time, i.e., a four-year period. Teachers tend to leave the system but later return. Therefore, the four-year annualized attrition rate is only 6.9 percent."

The state is currently trying to collect data about shortages. It has not issued emergency certificates since 1982 and now issues warrants. There are 300 people on warrants teaching in the state now.

SOUTH DAKOTA

1,324 regular teaching certificates were issued by the state in 1985. The state estimates 55 percent get full-time teaching jobs and 3.8 percent of its 8,153 teachers in 1985-86 were on emergency certificates.

The state is not reporting shortages and does not anticipate there will be any in five years from now except in some areas.

TENNESSEE

About 6,500 regular certificates have been awarded to prospective teachers in each of the last four years. An estimated 80 percent get full-time teaching jobs. About 0.8 percent of teachers in the state have "permits"-- 325 teachers taught with permits in 1985-86.

The state says demand is greater than supply for music, art and special education teachers at the elementary level and special education, math, science and foreign language teachers at the secondary level. The respondent to the NCEI survey stated, "We always will have shortages in math and science."

TEXAS

9,988 and 10,075 regular teaching certificates were issued in 1985 and 1984, respectively. The state reported 2.71 percent of its teachers in 1983-84 were on emergency certificates, 2.46 percent were in 1984-85, data were not available for 1985-86 and an anticipated 2.5 percent of its teachers would be on emergency certificates this year.

Texas reported to NCEI it needed 1,700 elementary and 2,700 secondary teachers more than it had for this year and anticipates continuing shortages in the next five years. As noted elsewhere in this document, Texas is one of the fastest growing enrollment states in the nation and is the only one that had more students enrolled in its schools in 1985-86 than in 1972-73 -- the peak enrollment period for the nation.

UTAH

2,917 and 2,161 regular teaching certificates were issued in 1985 and 1984, repectively. The state estimates 60 percent of those to whom it awards regular certificates get full-time teaching jobs. Utah reported a turnover rate of 5.83 in 1983, 5.56 in 1984 and 6.33 in 1985.

The state says it has about one percent of its teachers on emergency certificates in any given year. Shortages exist in math, science and computers at the secondary level. The state anticipates shortages at all levels of schooling five years hence. (Utah has the fastest growing population of under-5-year-olds in the nation).

VERMONT

Approximately 650 regular certificates have been issued annually for the last four years. Thirteen teachers held emergency certificates in 1983-84, 16 the following year, and 49 did in 1985-86. Vermont employs about 7,000 educators. The state needed 22 more secondary physics, advanced math, chemistry and French/Spanish teachers than it had this fall.

VIRGINIA

3,168, 2,583 and 2,263 regular teaching certificates were awarded by the state in 1984-85, 1983-84 and 1982-83, respectively. The state estimates about half of the people to whom it issued full teaching certificates got full-time jobs teaching. The turnover rate in each of the last three years was 6.9 percent.

The state issues provisional, not emergency, certificates to those people who do not meet all the state's requirements for a regular certificate. About 0.9 percent of the state's 57,849 teachers in 1985-86 had provisional certificates.

Virginia reports demand is greater than supply at both the elementary and secondary levels but does not know by how much. The state is doing a new supply/demand study. The spokesperson for the NCEI survey said, "The demand seems to be for P.E. (physical education) teachers."

WASHINGTON

3,641, 3,588 and 3,252 regular teaching certificates were issued in 1985, 1984 and 1983, respectively. The state reports 44.3 percent of those to whom it awarded full certification to teach in 1983 got full-time jobs teaching. In 1984, the percentage was 48.4 percent and in 1985, 47.7 percent. The state reported 1,640 teachers in 1985-86 did not return, indicating a turnover rate of 4.3 percent. Washington reported 80 out of 34,925 (0.2 percent) of its teachers in 1983-84 and 79 out of 35,155 (0.2 percent) in the next year were on emergency certificates. The state reports the proportion is holding steady.

The state is not currently experiencing shortages and the spokesperson for the NCEI survey said "opinions differ" about whether or not Washington will be having shortages five years from now.

WEST VIRGINIA

2,199 regular teaching certificates were issued in 1985-86 and 2,522 in 1984-85. The annual turnover rate was a reported 5.9 percent in 1983-84, 5.1 percent in 1984-85 and 4.9 percent in 1985-86.

The state reported five percent of its teachers in 1983-84 were on emergency certificates, 5.8 percent the following year, 6.3 percent in 1985-86 and an estimated six to seven percent would be on emergency certification this school year. Further investigation revealed that, in West Virginia, about 88 percent of its emergency certificates are in special education -- out of 1,500 to 1,600 emergency certificates issued last year, about 1,300 were in special education.

West Virginia says supply of teachers is not keeping up with demand but does not know by how much.

WISCONSIN

7,323, 9,426 and 9,061 regular teaching certificates were issued in 1985, 1984 and 1983, respectively. The spokesperson for the NCEI survey reported the state had a surplus of teachers and that it is quite conceivable that one person could have more than one certificate and that the average person has at least two licenses -- one out-of-state and one in-state. The state estimates its annual turnover rate is "definitely not higher than the national average (six percent)."

An estimated three percent of the state's teachers are on emergency certificates. Most of them are in special eduation and a lot of them are people who are teaching one subject out of field.

The state is not reporting shortages and does not anticipate there will be any five years from now.

WYOMING

The state's certification office says data such as numbers of certificates issued are not available but that it estimates only about 47 percent of those to whom it awarded initial regular certificates in 1985 got full-time jobs teaching. The state does not issue emergency certificates and is not experiencing a demand for teachers greater than supply and is not anticipating shortages of teachers.

The respondent to the NCEI survey stated, "I am hopeful that in the near future, as we redesign our computer program, that we will be able to address your statistical inquiries beginning with data generated in FY 1986."

Alternate Certification

The number of states that are now implementing routes for certifying teachers that are alternatives to the traditional approved-college-teacher-education-program route has jumped from eight in 1984 to 23 in 1986. An additional six states have proposed alternatives and eleven are considering them. Eleven states now, compared with 18 in 1984, say they are not even considering alternatives to the traditional approved-college-teacher-education-program route for certifying teachers.

Twelve states reported how many certificates they issued in 1985-86 to people who had gone through an alternate route. A total of 2,500 full teaching certificates was issued through alternate routes by these 12 states in 1985-86.

TABLE 13. STATUS OF STATES CONCERNING ALTERNATIVES TO APPROVED COLLEGE TEACHER EDUCATION PROGRAMS FOR CERTIFYING TEACHERS: 1986

States	Considering Alternatives	Proposed Alternatives	Implementing Alternatives	Not Even Considering Alternatives	# Certified through 1985-86
Alabama			X		0
Alaska			X		
Arizona			X		20
Arkansas	X				
California			X		320
Colorado			X		-
Connecticut		X			-
Delaware		X			-
Dist. of Col.		X			-
Florida				X	
Georgia			X		0
Hawaii			X		40
Idaho	X				547
Illinois				X	-
Indiana				X	-
Iowa					-
Kansas					-
Kentucky					-
Louisiana			X		-
Maine					-
Maryland				X	
Massachusetts			X		600
Michigan				X	-
Minnesota	X				-
Mississippi				X	47
Missouri					-
Montana			X		-
Nebraska			X		-
Nevada				X	-
New Hampshire			X		249
New Jersey			X		121
New Mexico	X				-
New York				X	-
North Carolina				X	90
North Dakota				X	-
Ohio			X		-
Oklahoma					-
Oregon				X	NA
Pennsylvania					-
Rhode Island				X	-
South Carolina			X		316
South Dakota	X				-
Tennessee	X				200
Texas				X	-
Utah	X				50
Vermont			X		
Virginia			X		
Washington	X				
West Virginia		X			
Wisconsin				X	
Wyoming			X		

Source: The National Center for Education Information, Teacher Certification Survey, 1986.

Teacher Shortages

Data from the Department of Education's Center for Statistics show supply of teachers is keeping up with the demand in all but a few critical areas -- mathematics, science, special education, and foreign languages. Also, the proportions of teachers not fully certified is revealed as nowhere near what popular perceptions would have it. The Center for Statistics conducted a survey in school year 1983-84 to determine the demand for, and availability of, qualified teachers in critical areas within education, in accordance with a Congressional mandate in the General Education Provisions Act. In this survey, a nationally representative sample of employers of teachers in both public and private elementary and secondary education was asked a series of questions about teacher employment, including information about certification status and teacher shortages in their schools and school districts.

The survey found:

- 98 percent of teachers in public schools and 84 percent in private schools were fully certified to teach in their principal field of assignment under the laws of the states in which they were teaching. For teachers newly hired in the 1983-84 school year, 91 percent in public schools and 79 percent in private schools were fully certified.

- 212,500 new teachers were hired in fall 1983, representing 7.9 percent of the total public and private elementary and secondary teaching force. Public schools alone hired 148,200 new teachers, representing 6.5 percent of all public school teachers. The survey did not distinguish between teachers taking their first teaching job and those moving from one employer to another.

- There were an estimated 3,965 shortages among teacher candidates during the 1983-84 school year. In its survey, the Center defined shortages as "positions vacant, abolished, or transferred to another field ... because a candidate was unable to be found." The only areas showing a large number of shortages, relative to their population of teachers, were special education, bilingual education, physical sciences, art, music, and computer science.

- 742 of the 3,965 shortages were in general elementary education. This number represents 0.08 percent (eight-hundredths of one percent) of all the public and private teachers employed in this area.

- In bilingual education, the 163 shortages represented a ratio of 8.8 shortages to every 1,000 teachers. In special education, the shortage of 1,027 represented a ratio of 3.9 per 1,000 teachers.

- 1,647 shortages were reported for public and private secondary schools. The fields registering a shortage of more than 100 teachers were: special education - 337; mathematics - 177; biological and physical sciences - 166; English language arts - 160, and "all other secondary" - 119. The areas

showing the highest ratio of shortages to 1,000 teachers in that field at the secondary level were: speech impaired - 6.2; physics - 4.5; seriously emotionally disturbed - 3.9; bilingual education - 3.8, and computer science - 3.7.

An earlier study by the Center for Statistics showed that in the fall of 1977 (right in the middle of the declining school enrollment period), there was an estimated shortage of 9,245 teachers. By instructional field, the greatest shortages reported were in special education (3,200), bilingual education (1,200) and mathematics (1,100).

The 33rd annual study of teacher supply and demand by the National Education Association in 1980 showed, "The number of prospective teachers from the 1980 graduating class seeking teaching positions (119,250) exceeds by 47,825 the number of teaching positions actually open to them (71,425).... Teaching assignments in which supply is least adequate are mathematics, natural and physical sciences, agriculture, special education, industrial arts, distributive education, and vocational-technical subjects.... The number of job openings for elementary school teachers are likely to improve in 1983-84. As a result, employment prospects for elementary school teachers are likely to improve in the mid-1980's."[,1]

The bottom line on the teacher shortage issue is this: Nobody really knows. "Shortage" means different things to different people. The data currently available are suspect, to say the least.

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1. Teacher Supply and Demand in Public Schools, 1980-81, the National Education Association, Washington, D.C.

TABLE 14

Teacher Candidate Shortages* (in Full-Time Equivalents) in Elementary/Secondary Schools as Ratio to Current Teachers, by Selected School Characteristics: United States, November 1983

Characteristic	Number of Candidate Shortages	Ratio to 1,000 Current Teachers
Total schools	3,970	1.6
Elementary	2,320	1.6
Secondary	1,650	1.5
Private schools	560	1.7
Elementary	370	1.6
Secondary	190	1.7
Public schools	3,410	1.5
Elementary	1,950	1.6
Secondary	1,460	1.4
Northeastern	210	.4
North Central	670	1.2
Southern	1,020	1.4
Western	1,510	4.1
SMSA central city	1,980	4.1
SMSA non-central city	640	.7
Nonmetropolitan	780	1.0
Small district	380	1.4
Medium-sized district	790	.7
Large district	2,240	2.6

*Teaching positions for which a teacher was sought and could not be found during the recruiting period (spring-to-fall 1983) and for which the opening was vacant or was withdrawn, abolished, or transferred to another field. Includes positions for which a temporary substitute was hired.

NOTE: The regional and metropolitan status categories correspond to Bureau of the Census definitions provided in the Definitions of Selected Terms in the appendix. Districts were defined as follows: small—enrollment under 1,000 students; medium-sized—enrollment of 1,000 to 9,999 students; and large—enrollment of 10,000 students and over. Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Survey of Teacher Demand and Shortage, unpublished tabulations (September 1984).

SOURCE: U.S. Department of Education, Center for Statistics, The Condition of Education 1985, page 148

TABLE 15

Uncertified[1] Teachers as Percent of All Elementary/Secondary School Teachers,[2] by Control of School and Field of Assignment: United States, November 1983

Field of Assignment	Public and Private		Public		Private	
	Number Uncertified	Percent of All Teachers	Number Uncertified	Percent of All Teachers	Number Uncertified	Percent of All Teachers
Total	88,260	3.4	35,690	**1.6**	52,560	15.6
Preprimary education	12,370	13.7	760	1.3	11,610	37.6
General elementary education	21,230	2.4	6,390	.9	14,840	10.1
Art	1,590	3.1	340	.8	1,250	18.8
Basic skills and remedial education	840	2.0	560	1.5	280	7.2
Bilingual education	3,590	12.0	3,470	**12.0**	*110	*13.0
Biological and physical sciences	5,360	4.1	2,820	2.5	2,540	15.5
Biology	1,090	3.7	500	2.0	590	14.7
Chemistry	590	4.0	200	1.6	400	15.8
Physics	490	5.6	200	2.8	290	18.3
General and all other sciences	3,190	4.0	1,930	2.7	1,260	15.2
Business (non-vocational)	990	1.8	260	.5	730	14.8
Computer science	790	8.6	270	**3.9**	530	21.8
English language arts	4,560	2.5	1,900	1.2	2,650	12.8
Foreign languages	2,830	5.5	790	2.0	2,040	18.6
Health, physical education	2,920	2.2	920	.8	2,000	14.0
Home economics	360	.9	200	.6	160	10.4
Industrial arts	620	1.4	380	.9	240	18.0
Mathematics	6,080	4.1	3,160	2.4	2,930	16.1
Music	2,390	3.0	640	.9	1,750	19.1
Reading	1,560	3.2	650	1.5	910	20.8
Social studies/social sciences	3,380	2.3	1,360	1.1	2,020	13.1
Special education	9,340	3.5	7,820	3.1	1,520	10.9
Mentally retarded	1,800	3.3	1,440	2.7	370	17.7
Seriously emotionally disturbed	1,250	4.7	870	**3.8**	*380	9.9
Specific learning disabled	3,050	4.2	2,560	**3.6**	490	17.7
Speech impaired	400	1.4	280	1.1	*120	*13.9
Unspecified special education	2,840	3.5	2,670	**3.4**	*170	*3.7
Vocational education	2,350	3.6	2,260	**3.5**	90	14.4
Other elementary education	900	3.0	280	1.0	*620	23.6
Other secondary education	4,220	7.8	450	1.1	3,770	34.1

*Caution should be exercised in drawing conclusions from the data because of the small number of cases reported and large standard errors associated with the estimates.

[1]Teachers who do not hold a regular or standard State certification in the field of assignment. Includes teachers with regular or standard State certification but not in field of assignment and continuing teachers who have only an emergency, temporary, or provisional certification.

[2]Estimated full-time equivalent.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Survey of Teacher Demand and Shortage, unpublished tabulations (September 1984).

SOURCE: U.S. Department of Education, Center for Statistics, The Condition of Education 1985, page 158.

TABLE 16.

Teacher Candidate Shortages[1] (in Full-Time Equivalents) in Public and Private Elementary/Secondary Schools, by Field of Assignment and as Ratio to Current Teachers in Field: United States, November 1983

Field of Assignment	Total		Public		Private	
	Number of Candidate Shortages	Ratio to 1,000 Current Teachers	Number of Candidate Shortages	Ratio to 1,000 Current Teachers	Number of Candidate Shortages	Ratio to 1,000 Current Teachers
Total	3,970	1.6	3,410	**1.5**	560	1.7
Preprimary education	80	.9	80	1.4	0	.0
General elementary education	740	.8	640	.9	*110	*.7
Art	180	3.6	120	2.8	*60	*9.0
Basic skills and remedial education	120	2.9	110	2.7	*20	*4.4
Bilingual education	260	8.8	260	**9.1**	0	.0
Biological and physical sciences	230	1.7	180	1.5	*50	*3.1
Biology	50	1.7	50	2.0	0	.0
Chemistry	30	1.9	20	1.5	*10	*3.4
Physics	40	4.5	*30	***4.3**	*10	*5.3
General and all other sciences	110	1.4	80	1.1	*30	*4.0
Business (non-vocational)	20	.4	20	.4	*([2])	*.3
Computer science	30	3.7	*20	***3.6**	*10	*4.3
English language arts	170	.9	130	.8	*40	*1.8
Foreign languages	80	1.5	70	1.8	*([2])	*.3
Health, physical education	100	.8	100	.8	0	.0
Home economics	30	.7	20	.4	*10	*7.7
Industrial arts	80	1.9	50	1.2	*30	*23.7
Mathematics	260	1.8	250	2.0	*10	*.5
Music	240	3.1	150	2.2	*90	*9.9
Reading	20	.4	20	.5	0	.0
Social studies/social sciences	70	.5	60	.5	*([2])	*.2
Special education	*1,030	3.9	910	3.6	*120	*8.6
Mentally retarded	150	2.8	110	2.0	*50	*23.4
Seriously emotionally disturbed	100	3.7	100	**4.3**	0	.0
Specific learning disabled	190	2.6	190	2.7	*([2])	.7
Speech impaired	180	6.3	160	**6.1**	*10	*15.0
Other special education	410	5.0	350	**4.5**	*60	*12.8
Vocational education	70	1.1	70	1.1	0	.0
Other elementary education	30	1.1	30	1.2	0	.0
Other secondary education	120	2.2	120	2.7	*([2])	*.4

*Because of the small number of cases reported and large standard errors associated with the estimates, caution should be exercised in drawing conclusions from the data.

[1]Teaching positions for which a teacher was sought and could not be found during the recruiting period (spring-to-fall 1983) and for which the opening was vacant or was withdrawn, abolished, or transferred to another field. Includes positions for which a temporary substitute was hired.

[2]Less than 5.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Survey of Teacher Demand and Shortage, unpublished tabulations (September 1984).

SOURCE: U.S. Department of Education, Center for Statistics, The Condition of Education 1985, page 146.

Chapter 4: Enrollment Trends

While enrollment in public elementary and secondary schools nationally is edging back upward, after more than a decade of steady decline since 1972-73, the trend by no means holds in every state, nor even in every region of the United States. Forty-four states and the District of Columbia showed enrollment declines in the decade from 1972-73 to 1982-83, and, in 15 of these, enrollments continued to drop in each of the last three years -- Connecticut, the District of Columbia, Illinois, Indiana, Iowa, Maryland, Massachusetts, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Tennessee, Vermont, and West Virginia. However, total enrollments rose in both of the last two years in 23 of the 44 states.

Only seven states experienced an overall increase in enrollment between 1972-73 and 1982-83 -- Alaska, Arizona, Idaho, Nevada, Texas, Utah, and Wyoming. All but Wyoming have continued to increase their total elementary and secondary school enrollments in each of the last three years.

A very important fact about public school enrollment must be kept in mind when analyzing school trends in the nation: Most of the students are concentrated in a few states and in the large metropolitan areas in those states. Eleven states -- each enrolling more than a million students -- accounted for 55.1 percent of all the students enrolled in public elementary and secondary schools in the United States in 1985-86. These same eleven states enrolled 55.6 percent of all students in public elementary and secondary schools in 1972-73. They are, in order of decreasing enrollment size in 1985-86: California, Texas, New York, Ohio, Illinois, Michigan, Pennsylvania, Florida, New Jersey, North Carolina and Georgia. Five additional states had enrollments in excess of one million students in 1972-73 but have fallen below that number and continue to do so -- Indiana, Massachusetts, Michigan, Missouri and Virginia.

Texas is the only one of the million-plus-enrollment states that had more students enrolled in 1985-86 than in 1972-73 -- 316,371 (11.2 percent) more. Besides Texas, only California and Florida had more students enrolled in 1985-86 than in 1982. These three states accounted for nearly a fourth (22.7 percent) of the nation's public elementary and secondary school enrollment in 1985-86, compared with 19.5 percent of total enrollment during the peak year.

TABLE 17

PUBLIC ELEMENTARY AND SECONDARY ENROLLMENT

State	% Change 1972-1973 to 1982-1983	1982-1983	1983-1984	1984-1985	1985-1986	% Changes 1982-1983 to 1983-1984	1983-1984 to 1984-1985	1984-1985 to 1985-1986
United States.....	-14.0	39,698,833	39,223,841	39,373,476	39,468,269	-1.1	0.3	0.2
Alabama.....	-7.6	724,037	721,901	727,567	730,460	-0.2	0.7	0.3
Alaska.....	2.4	89,324	89,517	93,990	107,452	0.2	5.0	14.4
Arizona.....	4.4	552,425	545,750	567,000	569,200	-1.2	3.8	0.3
Arkansas.....	-4.5	432,565	426,363	432,508	433,410	-1.4	1.4	0.1
California.....	-12.0	4,065,486	4,087,986	4,150,430	4,242,240	0.5	1.5	2.2
Colorado.....	-5.1	545,209	542,175	545,427	550,642	-0.5	0.6	0.9
Connecticut.....	-25.0	505,150	487,400	478,012	472,427	-3.5	-1.9	-1.1
Delaware.....	-31.0	92,646	91,406	91,767	92,901	-1.3	0.3	1.2
District of Columbia.	-37.4	91,105	88,843	87,397	87,092	-2.4	-1.6	-0.3
Florida.....	-10.4	1,484,917	1,495,705	1,523,924	1,559,429	0.7	1.8	2.3
Georgia.....	-3.6	1,053,700	1,050,900	1,049,700	1,064,600	-0.2	-0.1	1.4
Hawaii.....	-9.0	161,874	161,932	163,364	163,899	0.0	0.8	0.3
Idaho.....	11.0	205,824	206,342	210,700	211,425	0.2	2.1	0.3
Illinois.....	-20.3	1,875,770	1,843,708	1,837,058	1,776,756	-1.7	-0.3	-3.2
Indiana.....	-17.6	999,542	984,090	973,858	966,057	-1.5	-1.0	-0.8
Iowa.....	-23.2	505,582	494,966	490,402	485,443	-2.1	-0.9	-1.0
Kansas.....	-17.4	407,074	404,500	405,822	410,229	-0.6	0.3	1.0
Kentucky.....	-8.8	650,368	647,414	644,421	643,903	-0.4	-0.4	0.0
Louisiana.....	-8.5	775,700	768,450	795,800	804,600	-0.9	3.5	1.1
Maine.....	-14.3	211,986	207,000	207,839	206,827	-2.3	0.4	-0.4
Maryland.....	-24.1	699,201	682,155	673,763	671,560	-2.4	-1.2	-0.3
Massachusetts.....	-23.0	925,160	879,101	878,000	841,255	-4.9	-0.1	-4.1
Michigan.....	-19.7	1,761,521	1,735,881	1,743,000	1,680,000	-1.4	2.5	-3.6
Minnesota.....	-21.0	715,221	677,891	695,392	696,513	-5.2	2.5	0.1
Mississippi.....	-12.4	462,461	460,000	459,140	464,280	-0.5	-0.1	1.1
Missouri.....	-21.7	802,841	795,453	793,793	795,107	-0.9	-0.2	0.1
Montana.....	-11.7	152,400	153,700	154,240	154,072	0.8	0.3	-0.1
Nebraska.....	-19.6	269,009	266,998	265,619	265,819	-0.7	-0.5	0.0
Nevada.....	14.7	151,100	151,200	151,600	155,000	0.0	0.2	2.2
New Hampshire.....	-4.0	160,199	158,597	158,615	160,974	-1.0	0.0	1.4
New Jersey.....	-22.8	1,172,520	1,147,841	1,117,782	1,110,194	-2.1	-2.6	-0.1
New Mexico.....	-4.1	269,111	269,949	260,874	264,886	0.3	-3.3	1.5
New York.....	-22.9	2,705,413	2,633,600	2,625,900	2,608,500	-2.6	-0.2	-0.6
North Carolina.....	-4.7	1,103,480	1,089,606	1,094,545	1,092,893	-1.2	0.4	-0.1
North Dakota.....	-17.6	116,569	114,765	118,233	117,970	-1.5	3.0	-0.2
Ohio.....	-23.4	1,856,500	1,828,100	1,806,100	1,793,400	-1.5	-1.2	-0.7
Oklahoma.....	-4.3	593,825	588,038	590,000	596,000	-0.9	0.3	1.0
Oregon.....	-6.3	448,184	446,700	446,685	447,522	-0.3	0.0	0.1
Pennsylvania.....	-24.6	1,783,969	1,736,500	1,702,060	1,673,450	-2.6	-1.9	-1.6
Rhode Island.....	-27.5	139,362	136,179	134,034	133,450	-2.2	-1.5	-0.4
South Carolina.....	-3.1	608,519	600,800	602,720	605,790	-1.2	0.3	0.5
South Dakota.....	-23.8	123,625	122,656	122,818	123,875	-0.7	0.1	0.8
Tennessee.....	-6.3	830,224	826,470	820,753	815,414	-0.4	-0.6	-0.6
Texas.....	5.3	2,985,659	2,995,000	3,059,845	3,149,380	0.3	2.1	2.9
Utah.....	20.7	369,338	378,208	390,141	403,305	2.4	3.1	3.3
Vermont.....	-14.0	91,510	91,038	90,900	90,200	-0.5	-0.1	-0.7
Virginia.....	-8.8	975,727	966,110	965,222	968,104	-0.9	0.0	0.2
Washington.....	-6.6	738,618	734,364	740,886	748,662	-0.5	0.8	1.0
West Virginia.....	-8.5	375,115	371,251	362,941	357,923	-1.0	-2.2	-1.3
Wisconsin.....	-21.1	784,830	774,646	767,542	768,000	-1.2	-0.9	0.0
Wyoming.....	18.9	101,665	100,965	103,187	102,779	-0.6	2.2	-0.3

SOURCE: Basic Data from the National Education Association, Estimates of School Statistics, Selected Years.

Table 18. Numbers of Students and Teachers in States that Enroll a Million or More Students

State	1985-1986 Enrollment	1985-1986 Teachers	1972-1973 Enrollment	1972-1973 Teachers	1972-1973 to 1984-1985 Changes Enrollment No.	Enrollment %	Teachers No.	Teachers %
CA	4,242,240	177,230	4,500,978	187,552	-258,738	-5.7	-10,322	- 5.5
TX	3,149,380	175,600	2,833,009	130,517	+316,371	+11.2	+44,883	+34.4
NY	2,608,500	169,700	3,494,805	186,943	-886,305	-24.5	-17,243	- 9.2
OH	1,793,400	98,230	2,415,348	104,624	-621,948	-25.7	- 6,394	- 6.1
IL	1,776,756	100,051	2,354,564	109,823	-577,808	-24.5	- 9,772	- 8.9
MI	1,680,000	78,970	2,193,270	90,218	-513,270	-23.4	-11,248	-12.5
PA	1,673,450	100,800	2,361,285	111,682	-687,835	-29.1	-10,882	- 9.7
FL	1,559,429	88,973	1,642,045	66,787	- 82,616	- 5.0	+22,186	+33.2
NJ	1,116,194	73,810	1,497,867	77,561	-381,673	-25.5	- 3,751	- 4.8
NC	1,092,893	55,919	1,158,549	50,033	- 65,656	- 5.7	+ 5,886	+11.8
GA	1,064,600	57,370	1,084,402	49,091	- 19,802	- 1.8	+ 8,279	+16.9
	21,756,842	1,176,553	25,536,122	1,295,348				
U.S.	39,468,269	2,177,851	45,960,736	2,108,846				

SOURCE: Basic data from the National Education Association.

The eleven states that enroll more than a million students each not only enroll more than half of the students in the nation, they also employ more than half of the teachers -- 54.0 percent in 1985-86 and 61.4 percent in 1972-73. While only Texas had more students in the latter year than in the former, Florida, North Carolina and Georgia joined Texas in having more teachers in 1985-86 than in 1972-73.

Seven additional states did have more students enrolled in their schools in 1985-86 than in 1972-73 -- Alaska, Arizona, Idaho, Nevada, Oregon (almost no change), Utah, and Wyoming. Thirteen states had more students in

elementary schools in 1985-86 than in 1972-73 -- Alaska, Arizona, California, Colorado, Louisiana, Nevada, New Hampshire (almost no change), New Mexico, South Carolina, Tennessee, Texas, Utah, and Wyoming. Nine states had more students in public secondary schools last year than in 1972-73 -- Alaska, Arizona, Arkansas, Georgia, Nevada, Texas, Utah, Vermont, and Wyoming.

Analyzing all of these phenomena at the same time shows one pretty dramatic fact:

o Texas and Utah are the only two states in the country that continued to have increases in school enrollments at both the elementary and secondary levels since the 1972-73 peak year of enrollment for the nation.

o Of the 16 states that had enrollments in excess of one million students in 1972-73, eleven still enrolled more than a million students in 1985-86, but only California, Florida, and Texas showed steady enrollment increases in the last three years. Considering just the last two years, New York gets added to the list of million-students-plus states that have shown enrollment increases in each of the years since 1983-84.

Elementary School Enrollment Trends

While only 10 states showed an increase in elementary school enrollments in the decade between 1972-73 and 1982-83, there were 27 states with an increase in both of the last two years (six of them had no change in one of those two years).

Eleven states reported elementary enrollment declines from 1972-73 to 1982-83 and continuing through 1985-86 -- Connecticut, Illinois, Indiana, Maine, Massachusetts, Missouri, North Carolina, Ohio, Oklahoma, Pennsylvania, and West Virginia. Six additional states and the District of Columbia reported declines for the period from 1972-73 through 1984-85, but an upward swing in 1985-86 -- Kentucky, Maryland, Minnesota, New Hampshire, New Jersey, and Virginia.

Not all of the ten states that showed increases in elementary enrollments at the end of the decade ending in 1982-83 continued the upward trend -- Tennessee's rose for the decade, then dropped in each of the last three years; Wyoming's kept rising, then fell last year; Nevada's and New Mexico's dropped from 1983-84 to 1984-85, but turned upward again the following year.

Eight states showed steady elementary enrollment gains in each of the last three years -- Alaska, California, Idaho, Kansas, North Dakota, South Dakota, Texas, and Utah. Of these, only Idaho, Texas, and Utah showed elementary school enrollment gains for the decade preceding.

o The fastest-growing elementary school enrollment states since 1983-84 (those showing enrollment growth rates greater than the national average in each of the last two years) -- Alabama, Alaska, Arizona, Delaware, Florida, Hawaii, Idaho, Illinois, Kansas, New York, Texas, Utah, and West Virginia --

TABLE 19

PUBLIC ELEMENTARY SCHOOL ENROLLMENT

State	% Change 1972-1973 to 1982-1983	1982-1983	1983-1984	1984-1985	1985-1986	% Changes 1982-1983 to 1983-1984	1983-1984 to 1984-1985	1984-1985 to 1985-1986
United States.....	-11.1	23,671,666	23,443,766	23,770,897	24,013,897	-0.9	1.3	1.0
Alabama.....	-5.1	386,828	385,291	392,304	396,803	-0.3	1.8	1.1
Alaska.....	-5.3	49,256	50,200	52,000	61,453	1.9	3.6	18.1
Arizona.....	2.2	388,873	387,175	401,000	420,600	-0.4	3.5	4.8
Arkansas.....	-1.7	233,645	232,536	232,337	234,287	-0.4	0.0	0.8
California.....	-1.2	2,801,818	2,835,050	2,855,780	2,920,125	1.1	0.7	2.2
Colorado.....	-0.5	320,798	319,064	322,416	329,347	-0.5	1.0	2.1
Connecticut.....	-29.5	337,299	325,936	315,794	313,559	-3.3	-3.1	-0.7
Delaware.....	-33.6	45,963	45,545	46,901	48,814	-0.9	3.0	4.1
District of Columbia.	-41.8	50,921	50,251	49,787	50,030	-1.3	-0.9	0.4
Florida.....	-10.2	783,685	778,909	795,797	823,016	-0.6	2.1	3.4
Georgia.....	-5.3	652,900	648,500	648,970	656,800	-0.6	0.0	1.2
Hawaii.....	-10.1	86,925	86,920	88,813	89,920	0.0	2.2	1.2
Idaho.....	28.7	115,237	115,550	118,647	120,215	0.2	2.6	1.3
Illinois.....	-12.5	1,286,858	1,271,447	1,266,937	1,243,575	-1.1	-0.3	-1.8
Indiana.....	-19.3	523,733	515,914	505,758	505,845	-1.4	-1.9	0.0
Iowa.....	-26.4	268,213	262,581	262,733	264,113	-2.1	0.0	0.5
Kansas.....	-11.5	248,496	249,000	253,789	260,362	0.2	1.9	2.5
Kentucky.....	-3.9	434,426	431,243	427,966	429,391	-0.7	-0.7	0.3
Louisiana.....	7.6	556,000	555,390	579,900	584,600	-0.1	4.4	0.8
Maine.....	-17.2	146,848	144,500	144,136	142,790	-1.6	-0.2	-0.9
Maryland.....	-32.6	344,147	335,757	328,320	346,542	-2.4	-2.2	5.5
Massachusetts.....	-9.0	613,974	586,482	578,000	553,655	-4.4	-1.4	-4.2
Michigan.....	-21.5	1,156,597	1,132,701	1,140,000	1,124,000	-2.0	0.6	-1.4
Minnesota.....	-23.8	353,137	348,193	347,678	357,564	-1.4	-0.1	2.8
Mississippi.....	-16.1	256,325	255,000	257,101	265,271	-0.5	0.8	3.1
Missouri.....	-24.8	547,057	546,155	545,062	544,197	-0.1	-0.2	-0.1
Montana.....	-8.5	106,900	108,300	108,905	108,121	1.3	0.5	-0.7
Nebraska.....	-16.8	151,105	149,519	149,497	150,898	-1.0	0.0	0.9
Nevada.....	12.2	81,640	81,730	79,400	83,200	0.1	-2.8	4.8
New Hampshire.....	-3.4	93,887	92,948	92,632	96,213	-1.0	-0.3	3.8
New Jersey.....	-25.0	738,245	725,703	712,027	715,358	-1.6	-1.8	0.4
New Mexico.....	3.8	149,900	151,332	143,196	147,609	0.9	-5.3	3.0
New York.....	-30.3	1,314,575	1,285,800	1,306,300	1,327,600	-2.1	1.5	1.6
North Carolina.....	-3.6	770,952	761,053	758,402	752,899	-1.2	-0.3	-0.7
North Dakota.....	-14.5	80,647	80,903	83,157	83,102	0.3	2.8	0.0
Ohio.....	-24.0	1,148,400	1,130,800	1,108,400	1,094,600	-1.5	-1.9	-1.2
Oklahoma.....	-0.1	343,317	344,611	334,000	326,000	0.3	-3.0	-2.3
Oregon.....	-1.3	276,238	275,330	278,672	283,389	-0.3	1.2	1.6
Pennsylvania.....	-28.2	872,629	844,640	832,850	832,190	-3.2	-1.3	0.0
Rhode Island.....	-40.8	73,591	68,642	68,615	70,020	-6.7	0.0	2.0
South Carolina.....	8.9	424,363	420,000	422,420	423,860	-1.0	0.5	0.3
South Dakota.....	-22.3	85,718	85,920	86,228	87,228	0.2	0.3	1.1
Tennessee.....	8.6	592,002	590,148	583,578	574,692	-0.3	-1.1	-1.5
Texas.....	23.3	1,663,304	1,668,000	1,687,880	1,773,127	0.2	1.1	5.0
Utah.....	35.3	221,521	225,244	234,437	242,791	1.6	4.0	3.5
Vermont.....	-26.3	48,166	47,415	48,300	48,500	-1.5	1.8	0.4
Virginia.....	-9.8	600,396	588,476	585,028	588,656	-1.9	-0.5	0.6
Washington.....	-7.6	381,411	377,303	383,657	395,521	-1.0	1.6	3.0
West Virginia.....	-2.0	225,253	220,825	214,029	209,780	-1.9	-3.0	-1.9
Wisconsin.....	-22.6	449,982	446,807	451,474	453,000	-0.7	1.0	0.3
Wyoming.....	30.6	58,254	57,505	59,887	58,669	-1.2	4.1	-2.0

SOURCE: Basic Data from the National Education Association, Estimates of School Statistics, Selected Years.

TABLE 20

PUBLIC SECONDARY SCHOOL ENROLLMENT

State	% Change 1972-1973 to 1982-1983	1982-1983	1983-1984	1984-1985	1985-1986	% Changes 1982-1983 to 1983-1984	% Changes 1983-1984 to 1984-1985	% Changes 1984-1985 to 1985-1986
United States.....	-17.9	16,027,167	15,780,075	15,602,579	15,454,372	-1.5	-1.1	-0.9
Alabama.....	-10.2	337,209	336,610	335,263	333,657	-0.1	-0.4	-0.4
Alaska.....	14.1	40,068	39,317	41,990	45,999	-1.8	6.8	9.7
Arizona.....	10.1	163,552	158,585	166,000	175,600	-3.0	4.6	5.7
Arkansas.....	-7.6	198,920	193,827	200,331	199,123	-2.5	3.3	-0.6
California.....	-29.0	1,263,668	1,252,936	1,294,650	1,322,115	-0.8	3.3	2.1
Colorado.....	-10.6	224,411	223,111	223,011	221,295	-0.5	0.0	-0.7
Connecticut.....	-13.8	167,851	161,464	162,218	158,868	-3.8	0.4	-2.0
Delaware.....	-28.0	46,683	45,861	44,866	44,087	-1.7	-2.2	-1.7
District of Columbia.	-30.8	40,184	38,592	37,610	37,062	-3.9	-2.5	-1.4
Florida.....	-10.8	701,232	716,796	728,127	736,413	2.2	1.5	1.1
Georgia.....	-0.4	400,800	402,400	400,730	407,800	0.4	-0.4	1.7
Hawaii.....	-7.8	74,949	75,012	74,551	73,979	0.0	-0.6	-0.7
Idaho.....	-6.5	90,587	90,792	92,053	91,210	0.2	1.4	-0.9
Illinois.....	-33.5	588,912	572,261	570,121	533,181	-2.8	-0.3	-6.4
Indiana.....	-15.7	475,809	468,176	468,100	460,212	-1.6	0.0	-1.6
Iowa.....	-19.3	237,389	232,385	227,669	221,330	-2.1	-2.0	-2.7
Kansas.....	-25.0	158,578	155,500	152,033	149,867	-1.9	-2.2	-1.4
Kentucky.....	-17.0	215,942	216,171	216,455	214,512	0.1	0.1	-0.8
Louisiana.....	-33.1	219,700	213,060	215,900	220,000	-3.0	1.3	1.9
Maine.....	-7.0	56,138	62,300	63,703	64,037	11.0	2.2	0.5
Maryland.....	-13.6	355,054	346,398	345,443	325,018	-2.4	-0.2	-5.9
Massachusetts.....	-40.9	311,186	292,619	300,000	287,600	-5.9	2.5	-4.1
Michigan.....	-17.6	604,924	603,180	603,000	556,000	-0.2	-28.8	-7.7
Minnesota.....	-18.1	362,084	329,698	347,714	338,949	-8.9	5.4	-2.5
Mississippi.....	-7.5	206,136	205,000	202,039	199,009	-0.5	-1.4	-1.5
Missouri.....	-13.9	255,784	249,298	248,731	250,910	-2.5	-0.2	0.8
Montana.....	-18.3	45,500	45,400	45,335	45,951	-0.2	-0.1	1.3
Nebraska.....	-23.1	117,904	117,479	116,122	114,921	-0.3	-1.1	-1.0
Nevada.....	17.9	69,460	69,470	72,200	71,800	0.0	3.9	-0.5
New Hampshire.....	-4.9	66,312	65,649	65,983	64,761	-1.0	0.5	-1.8
New Jersey.....	-18.5	434,275	422,138	405,755	400,836	-2.7	-3.8	-1.2
New Mexico.....	-12.4	119,211	118,617	117,678	117,277	-0.4	-0.7	-0.3
New York.....	-14.4	1,390,838	1,347,800	1,319,600	1,280,900	-3.0	-2.0	-2.9
North Carolina.....	-7.1	332,528	328,553	336,143	339,994	-1.1	2.3	1.1
North Dakota.....	-23.9	35,922	33,862	35,076	34,868	-5.8	3.6	-0.5
Ohio.....	-22.5	708,100	697,300	697,700	698,800	-1.5	0.0	0.1
Oklahoma.....	-9.5	250,508	243,427	256,000	270,000	-2.8	5.1	5.4
Oregon.....	-13.4	171,946	171,370	168,613	164,133	-0.3	-1.9	-2.3
Pennsylvania.....	-20.7	911,340	891,860	869,210	841,260	-2.1	-2.5	-3.2
Rhode Island.....	-6.1	65,771	67,537	65,419	63,430	2.7	-3.1	-3.0
South Carolina.....	-22.6	184,156	180,800	180,300	181,930	-1.8	-0.2	0.9
South Dakota.....	-27.1	37,907	36,736	36,590	36,647	-3.1	-0.4	0.1
Tennessee.....	-30.1	238,222	236,322	237,175	240,722	-0.7	0.3	1.4
Texas.....	-16.4	1,322,355	1,327,000	1,371,965	1,376,253	0.3	3.3	0.3
Utah.....	4.0	147,817	152,964	155,704	160,514	3.5	1.8	3.1
Vermont.....	5.7	43,344	43,623	42,600	41,700	0.6	-2.3	-2.1
Virginia.....	-7.1	375,331	377,634	380,194	379,448	0.6	0.6	-0.1
Washington.....	-5.4	357,207	357,061	357,229	353,141	0.0	0.0	-1.1
West Virginia.....	-16.7	149,862	150,426	148,912	148,143	0.3	-1.0	-0.5
Wisconsin.....	-19.2	334,849	327,839	316,068	315,000	-2.0	-3.5	-0.3
Wyoming.....	5.6	43,411	43,460	43,300	44,110	0.1	-0.3	1.8

SOURCE: Basic Data from the National Education Association, Estimates of School Statistics, Selected Years.

accounted for 5.4 million students (22 percent of the total 24 million enrolled last year in public elementary schools). Note that Florida, New York, and Texas alone accounted for 3.9 million elementary students -- nearly three-fourths (72.2 percent) of all the students enrolled in these 13 fastest-enrollment-growing states and 16 percent of all the elementary school students enrolled in the nation.

Secondary School Enrollments

Due to the continuing exodus of the baby-boomers from high schools across the nation since the early 1970's, enrollments in secondary schools have been dropping steadily and are expected to continue to fall until the mid-1990's when the current burst of newcomers in elementary schools reaches high school. Since 1972-73, enrollments in the nation's public secondary schools have dropped 21.4 percent. Forty-four states and the District of Columbia reported a decrease in secondary school enrollment from 1972-73 to 1982-83. Twenty of these states show enrollments continuing their steady decline.

Six states reported increases in secondary school enrollments from 1972-73 to 1982-83 — Alaska, Arizona, Nevada, Utah, Vermont, and Wyoming. Only Utah continues to show steady enrollment jumps in its high schools.

Eleven states registered an increase in secondary school enrollment in each of the last two years, with eight of them reversing downward trends since 1972-73 -- California, Florida, Louisiana, Maine, North Carolina, Oklahoma, Tennessee, and Texas. Alaska, Arizona, and Utah continued secondary enrollment increases of the preceding decade.

TABLE 21

NUMBERS OF PUBLIC ELEMENTARY AND SECONDARY TEACHERS

State	% Change 1972-1973 to 1982-1983	1982-1983	1983-1984	1984-1985	1985-1986	% Changes 1982-1983 to 1983-1984	1983-1984 to 1984-1985	1984-1985 to 1985-1986
United States.....	1.4	2,135,511	2,117,057	2,145,542	2,177,851	-0.8	1.3	1.5
Alabama.....	15.0	39,084	39,200	36,099	36,913	0.2	-7.9	2.2
Alaska.....	35.9	6,027	6,387	6,090	6,213	5.9	-4.6	2.0
Arizona.....	34.8	25,753	25,662	25,920	25,200	-0.3	1.0	-2.7
Arkansas.....	14.0	23,712	23,897	24,085	23,699	0.7	0.7	-1.6
California.....	-9.1	173,270	170,435	175,135	177,230	-1.6	2.7	1.1
Colorado.....	16.6	29,375	29,447	28,822	28,818	0.2	-2.1	0.0
Connecticut.....	-7.2	33,210	32,715	32,467	33,125	-1.5	-0.7	2.0
Delaware.....	-14.1	5,409	5,436	5,516	5,745	0.4	1.4	4.1
District of Columbia.	-24.8	5,344	5,648	5,792	5,265	5.6	2.5	-9.0
Florida.....	22.8	82,008	83,074	86,223	88,973	1.3	3.7	3.1
Georgia.....	16.1	56,520	56,270	56,321	57,370	-0.4	0.0	1.8
Hawaii.....	16.6	8,226	8,073	8,141	8,362	-1.8	0.8	2.7
Idaho.....	24.8	9,810	9,900	10,160	10,256	0.9	2.6	0.9
Illinois.....	-5.1	103,586	101,056	100,497	100,051	-2.4	-0.5	-0.4
Indiana.....	-3.1	50,442	49,456	49,646	50,001	-1.9	0.3	0.7
Iowa.....	0.2	30,814	30,686	30,336	30,897	-0.4	-1.1	1.8
Kansas.....	2.1	26,052	25,802	26,260	26,660	-0.9	1.7	1.5
Kentucky.....	2.5	32,237	32,000	32,400	33,600	-0.7	1.2	3.7
Louisiana.....	6.2	42,460	41,620	41,720	42,900	-2.0	0.2	2.8
Maine.....	9.2	12,277	12 273	12,510	12,887	0.0	1.9	3.0
Maryland.....	-10.8	37,493	37,437	37,694	38,255	-0.1	0.6	1.5
Massachusetts.....	-9.6	52,000	56,874	56,333	56,390	9.3	-0.9	0.1
Michigan.....	-14.4	76,837	72,955	79,900	78,970	-5.1	9.6	-1.1
Minnesota.....	-10.6	39,736	38,544	39,400	40,530	-3.0	2.2	2.8
Mississippi.....	6.0	24,982	24,864	24,772	25,000	-0.4	-0.3	0.9
Missouri.....	2.6	45,957	46,714	47,240	48,090	1.6	1.1	1.8
Montana.....	4.8	9,520	9,350	9,756	10,099	-1.7	4.3	3.5
Nebraska.....	-7.6	17,378	16,785	17,513	17,574	-3.4	4.3	0.3
Nevada.....	37.5	7,222	7,293	7,496	7,751	0.9	2.7	3.4
New Hampshire.....	21.6	9,758	9,718	10,104	10,497	-0.4	3.9	3.8
New Jersey.....	-5.5	74,303	73,262	72,858	73,810	-1.4	-0.5	1.3
New Mexico.....	16.9	14,650	15,530	14,200	14,724	6.0	-8.5	3.6
New York.....	-12.8	165,200	164,000	164,900	169,700	-0.7	0.5	2.9
North Carolina.....	12.8	55,261	54,709	56,084	55,919	-1.0	2.5	-0.2
North Dakota.....	4.7	7,499	7,385	7,300	7,852	-1.5	-1.1	7.5
Ohio.....	-9.2	94,130	92,765	94,429	98,230	-1.4	1.8	4.0
Oklahoma.....	20.2	35,073	35,693	35,000	35,300	1.7	-1.9	0.8
Oregon.....	10.7	25,272	23,990	24,413	25,205	-5.0	1.7	3.2
Pennsylvania.....	-8.0	103,855	102,150	101,150	100,800	-1.6	-0.9	-0.3
Rhode Island.....	-7.7	7,399	7,441	8,710	8,755	0.5	-13.3	15.9
South Carolina.....	19.2	32,030	32,070	33,340	33,600	0.1	3.9	0.7
South Dakota.....	-2.3	7,812	7,989	8,022	8,153	2.2	0.4	1.6
Tennessee.....	5.6	39,409	39,136	40,008	40,303	-0.7	2.2	0.7
Texas.....	27.8	167,298	171,096	172,639	175,500	2.2	0.9	1.6
Utah.....	20.8	15,077	15,433	16,188	16,675	2.3	4.8	3.0
Vermont.....	9.3	6,251	6,235	6,200	6,370	-0.2	-0.5	2.7
Virginia.....	6.1	56,428	56,154	56,863	57,849	-0.4	1.2	1.7
Washington.....	5.4	34,121	33,979	35,155	36,143	-0.4	3.5	2.8
West Virginia.....	23.5	22,159	22,417	22,557	22,647	1.1	0.6	0.3
Wisconsin.....	2.1	49,038	47,600	45,350	45,700	-2.9	-4.7	0.7
Wyoming.....	62.4	6,747	7,059	6,990	7,295	4.6	-0.9	4.3

SOURCE: Basic Data from the National Education Association, Estimates of School Statistics, Selected Years.

Chapter 5: Numbers of Teachers

Teacher hiring practices seem to have little relationship with enrollment patterns in the states. As noted in Chapter 1 of this document, the nation employed more teachers in 1983-84 -- the year of lowest total public elementary and secondary school enrollment since the 1940's -- than it did in the peak-enrollment year, 1972-73. There were 8,211 more teachers and 6.7 million fewer students in the nation's public elementary and secondary schools in 1983-84 than in 1972-73. Those figures represent a 0.4 percent increase in teachers and a 14.6 percent decrease in numbers of students.

Even more dramatic than the change in teacher hiring over a period of declining enrollments is what has happened since 1983 -- the year elementary school enrollments started turning upward and the year of public awareness about the need for more teachers. There were about a quarter of a million (244,428) more students enrolled and 60,794 more teachers teaching in the nation's public schools in 1985-86 than in 1983-84. That's an additional teacher for every four additional students. Enrollment in 1985-86 still represented 6.5 million fewer students than in 1972-73 (a decrease of 14.2 percent), whereas the number of teachers was 69,005 more (5.7 percent) than in the earlier year.

But, again, the pattern is not uniform from state to state. Some states have lost students and added teachers. Some have lost students and dropped teachers. And a few have dropped students and teachers.

Only two states in the nation -- Illinois and Pennsylvania -- showed a decline in both numbers of students and teachers for the decade between 1972-73 and 1982-83 and in each of the three years following.

Sixteen states and the District of Columbia had fewer teachers in 1982-83 than a decade earlier. They all had severe enrollment declines during the period. Three of them -- Delaware, Rhode Island, and South Dakota -- turned upward in numbers of teachers in 1983-84 and have shown increases every year since, although only Delaware and South Dakota have experienced an increase in enrollments, and then, only since 1984-85. Eight of the 16 states that showed a decrease in numbers of teachers from 1972-73 to 1982-83 continued downward through the 1983-84 school year, but turned around in each of the last two

years -- California, Indiana, Maryland, Massachusetts, Minnesota, Nebraska, New York and Ohio. Only California and Minnesota had enrollment increases in each of the last two years. Four of the 16 states continued to drop teachers until last year (1985-86) when they showed more teachers than the year before -- Connecticut, Iowa, Mississippi and New Jersey. Mississippi is the only one of these four states that showed an increase in total elementary and secondary enrollment in any of the last three years, and its increase was only in the last year.

Table 22. States That Showed Increases in Numbers of Students and Teachers: 1983-84, 1984-85 and 1985-86

States that had Enrollment Increases in 1983-84, 1984-85 and 1985-86			States that Increased the Number of Teachers in 1983-84, 1984-85 and 1985-86		
Elementary	Secondary	Elementary and Secondary	Elementary	Secondary	Elementary and Secondary
Alaska	Florida	Alaska	Delaware	Florida	California
California	Maine	California	Florida	Indiana	Delaware
Indiana	Texas	Florida	Indiana	S. Carolina	Indiana
Kansas	Utah	Indiana	Louisianna	Texas	
North Dakota		Texas	Montana	Utah	Montana
South Dakota		Utah	Rhode Island		Nevada
Texas			S. Carolina		Rhode Island
Utah			South Dakota		S. Carolina
			Texas		South Dakota
			Utah		Texas
			West Virginia		Utah
					West Virginia

SOURCE: Basic data from the National Education Association

While a little over half of the states (27) registered an increase in total enrollment last year over the year before, all but six and the District of Columbia increased their teaching force. Four of these six states that showed a decline in numbers of teachers from 1984-85 to 1985-86 had shown an increase from 1983-84 to 1984-85 -- Arizona, Arkansas, Michigan, North Carolina -- and the District of Columbia. Only Illinois and Pennsylvania, as mentioned earlier, continue to hire fewer teachers while enrolling fewer and fewer students year after year.

Numbers of Teachers in Elementary Schools

As noted earlier, the spurt of enrollments is occuring at the elementary school level, so it is not surprising that the numbers of teachers in elementary schools is on the rise. Public elementary schools nationwide enrolled 570,131 more students and employed 40,463 more teachers in 1985-86 than in 1983-84 -- the lowest year for elementary enrollments -- representing a 2.3 percent increase in students and a 3.3 percent increase in teachers at the elementary school level.

The 1,179,282 teachers in public elementary schools in 1983-84 actually totaled 28,115 (2.4 percent) more than in 1972-73, when elementary schools enrolled 3.4 million more students. In 1985-86, there were 68,578 more teachers and 2.8 million fewer students in the nation's public elementary schools than during the period of peak enrollment, 1972-73.

It is noteworthy that four states account for nearly half (48.4 percent) of the total increase in elementary school enrollment from 1983-84 (the year enrollments started back up) to 1985-86 -- California, Florida, New York and Texas. These four states account for a little over a third (35.5 percent) of the increase in numbers of teachers. As of 1985-86, these four states enrolled 28.8 percent of all students and employed 27.9 percent of the teachers in public elementary schools. The statistics are not significantly different now than they were when enrollments were at their peak. In 1972-73, California, Florida, New York, and Texas enrolled 27.1 percent of the students and employed the same proportion of all the teachers (27.1 percent) in elementary schools in the nation.

However, whether enrollments have gone up or not, states have increased their teaching forces rather significantly since 1983-84. Thirty-two states had more teachers in their elementary schools in 1984-85 than in 1983-84, and 44 employed more teachers last year than in 1984-85. Eighteen states had increases in both enrollments and numbers of teachers in elementary schools from 1983-84 to 1984-85 and 29 had increases in both students and teachers from 1984-85 to 1985-86.

Half of the states (25) reported increases in numbers of elementary school teachers in both of the last two years. Thirteen of them also showed an increase in elementary enrollment for each of the last two years -- Delaware, Florida, Hawaii, Idaho, Kansas, Louisiana, New York, Oregon, South Carolina, South Dakota, Texas, Utah, and Washington.

TABLE 23

NUMBERS OF PUBLIC ELEMENTARY TEACHERS

State	% Change 1972-1973 to 1982-1983	1982-1983	1983-1984	1984-1985	1985-1986	% Changes 1982-1983 to 1983-1984	1983-1984 to 1984-1985	1984-1985 to 1985-1986
United States.....	3.0	1,179,282	1,171,053	1,184,337	1,211,516	-0.6	1.1	2.2
Alabama.....	17.7	19,862	19,950	18,634	19,055	0.4	-6.5	2.2
Alaska.....	32.7	2,793	3,214	3,800	3,438	15.0	18.2	-9.5
Arizona.....	32.0	18,488	18,343	18,700	17,800	-0.7	1.9	-4.8
Arkansas.....	15.3	11,589	11,657	11,773	11,592	0.5	0.9	-1.5
California.....	-7.6	108,756	108,496	107,040	114,270	-0.2	-1.3	6.7
Colorado.....	21.2	15,434	15,287	15,283	15,318	-0.9	0.0	0.2
Connecticut.....	-1.3	19,214	18,902	18,907	19,475	-1.6	0.0	3.0
Delaware.....	-9.1	2,439	2,451	2,600	2,691	0.4	6.0	3.5
District of Columbia.	-23.9	3,154	3,355	3,526	3,212	6.3	5.0	-8.9
Florida.....	38.8	46,030	46,435	48,186	48,641	0.8	3.8	0.9
Georgia.....	17.6	33,916	33,660	34,420	35,400	-0.7	2.3	2.8
Hawaii.....	23.4	4,499	4,400	4,459	4,470	-2.2	1.3	0.2
Idaho.....	41.0	5,090	5,120	5,315	5,365	0.5	3.8	0.9
Illinois.....	7.8	67,627	66,374	65,620	67,882	-1.8	-1.1	3.4
Indiana.....	-3.1	25,251	24,813	24,811	25,293	-1.7	0.0	1.9
Iowa.....	-4.2	14,452	14,264	14,002	14,516	-1.3	-1.8	3.6
Kansas.....	11.6	14,375	14,320	14,723	15,246	-0.3	2.8	3.5
Kentucky.....	7.9	20,931	20,778	21,000	21,940	-0.7	1.0	4.4
Louisiana.....	10.6	26,480	26,510	27,580	28,000	0.1	4.0	1.5
Maine.....	14.8	7,778	7,773	8,187	8,421	0.0	5.3	2.8
Maryland.....	16.2	17,344	17,318	17,370	17,920	-0.1	0.3	3.1
Massachusetts.....	-24.3	22,000	20,103	21,270	21,430	-8.6	5.8	0.7
Michigan.....	-17.3	39,615	42,515	42,500	42,500	7.4	0.0	0.0
Minnesota.....	-9.6	19,025	18,454	19,000	19,880	-3.0	2.9	4.6
Mississippi.....	3.7	13,634	13,507	13,431	13,500	-0.9	-0.5	0.5
Missouri.....	-3.8	23,003	23,342	23,726	24,850	1.4	1.6	4.7
Montana.....	-3.2	6,430	6,300	6,726	6,963	-2.0	6.7	3.5
Nebraska.....	-14.7	9,159	8,787	9,327	9,363	-4.0	6.1	0.3
Nevada.....	24.8	3,838	3,876	4,076	4,038	0.9	5.1	-0.9
New Hampshire.....	1.2	5,122	5,101	5,370	6,303	-0.4	5.2	17.3
New Jersey.....	0.2	42,479	41,884	41,893	42,736	-1.4	0.0	2.0
New Mexico.....	8.0	8,160	8,120	7,990	8,574	-0.4	-1.6	7.3
New York.....	-19.0	74,500	74,000	76,200	78,200	-0.6	2.9	2.6
North Carolina.....	3.7	33,303	32,970	32,915	32,750	-1.0	-0.1	-0.5
North Dakota.....	3.5	4,719	4,708	4,608	4,934	-0.2	-2.1	7.0
Ohio.....	-4.8	52,940	52,800	50,820	51,852	-0.2	-3.8	2.0
Oklahoma.....	19.8	18,294	18,682	18,300	18,300	2.1	-2.0	0.0
Oregon.....	23.1	14,817	14,070	14,256	14,691	-5.0	1.3	3.0
Pennsylvania.....	-12.5	48,917	48,114	47,744	47,708	-1.6	-0.7	0.0
Rhode Island.....	-17.0	3,573	3,581	3,723	4,404	0.2	3.9	18.2
South Carolina.....	24.8	20,408	20,430	21,270	21,400	0.1	4.1	0.6
South Dakota.....	1.3	5,200	5,334	5,387	5,607	2.5	0.9	4.0
Tennessee.....	10.4	24,713	24,264	25,192	25,189	-1.8	3.8	0.0
Texas.....	34.2	92,793	94,607	95,758	96,780	1.9	1.2	1.0
Utah.....	44.8	9,251	9,416	9,984	10,425	1.7	6.0	4.4
Vermont.....	-6.9	2,941	2,930	2,809	2,875	-0.3	-4.1	2.3
Virginia.....	10.4	33,303	33,141	32,975	32,982	-0.4	-0.5	0.0
Washington.....	-1.3	18,165	18,028	18,904	19,650	-0.7	4.8	3.9
West Virginia.....	32.3	12,229	12,652	12,427	12,637	3.4	-1.7	1.6
Wisconsin.....	5.8	26,674	26,100	25,100	26,100	-2.1	-3.8	3.9
Wyoming.....	78.1	4,575	4,566	4,720	4,950	-0.1	3.3	4.8

SOURCE: Basic Data from the National Education Association, Estimates of School Statistics, Selected Years.

Numbers of Secondary School Teachers

Overall, there were fewer teachers in secondary schools in 1983-84 than there were in 1972-73 following the trend of declining student enrollment in secondary schools. However, the number of teachers in high schools has been on the rise since 1983-84, even though enrollments continue to fall. From 1972-73 to 1983-84, the number of students enrolled in public secondary schools dropped by nearly 20 percent (19.4 percent) -- 3.4 million students. During this period, the number of secondary school teachers declined by 19,904 (2.0 percent). Between 1983-84 and 1985-86, the number of students in secondary schools fell an additional 2.0 percent -- 325,703 fewer students in public secondary schools in 1985-86 than in 1983-84. During the past two years, the number of teachers rose 2.1 percent -- there were 20,331 more secondary school teachers employed in 1985-86 than in 1983-84.

Only six states had more students enrolled in their secondary schools in 1972-73 than in 1982-83, but 32 had more secondary school teachers at the end of the decade than at the beginning. Twenty-eight states had more teachers in 1984-85 than the year before, and 32 had more secondary school teachers last year than in 1984-85.

Only three states showed increases in both enrollment and numbers of teachers in their public secondary schools in both of the last two years -- Florida, Texas, and Utah. Thirteen showed an increase in both enrollment and teachers the year before last (between 1983-84 and 1984-85) -- Arkansas, California, Florida, Idaho, Kentucky, Massachusetts, Minnesota, New Hampshire, North Carolina, North Dakota, Texas, Utah, and Virginia. Fourteen states reported an increase in both students and teachers in their secondary schools last year over the year before (1984-85) -- Alaska, Arizona, Florida, Georgia, Louisiana, Maine, Montana, Ohio, Oklahoma, South Carolina, Tennessee, Texas, Utah, and Wyoming.

TABLE 24

NUMBERS OF PUBLIC SECONDARY SCHOOL TEACHERS

State	% Change 1972-1973 to 1982-1983	1982-1983	1983-1984	1984-1985	1985-1986	% Changes 1982-1983 to 1983-1984	1983-1984 to 1984-1985	1984-1985 to 1985-1986
United States.....	-0.4	956,229	946,004	961,205	966,335	-1.0	1.6	0.5
Alabama.....	12.5	19,222	19,250	17,465	17,858	0.1	-9.2	2.2
Alaska.....	40.1	3,234	3,173	2,290	2,775	-1.8	-27.8	21.1
Arizona.....	41.5	7,265	7,319	7,220	7,400	0.7	-1.3	2.4
Arkansas.....	12.8	12,123	12,240	12,312	12,107	0.9	0.5	-1.6
California.....	-11.5	64,514	61,939	68,095	62,960	-4.0	10.0	-7.5
Colorado.....	11.9	13,941	14,160	13,539	13,500	1.5	-4.3	-0.2
Connecticut.....	-15.0	13,996	13,813	13,560	13,650	-1.3	-1.8	0.6
Delaware.....	-18.0	2,970	2,985	2,916	3,054	0.5	-2.3	4.7
District of Columbia.	-26.1	2,190	2,293	2,266	2,053	4.7	-1.1	-9.3
Florida.....	6.8	35,978	36,639	38,037	40,332	1.8	3.8	6.0
Georgia.....	13.8	22,604	22,610	21,901	21,970	0.0	-3.1	0.3
Hawaii.....	7.2	3,727	3,673	3,682	3,892	-1.4	0.2	5.7
Idaho.....	10.6	4,720	4,780	4,845	4,891	1.2	1.3	0.9
Illinois.....	22.3	35,959	34,682	34,877	32,169	-3.6	0.5	-7.9
Indiana.....	-3.1	25,191	24,643	24,835	24,708	-2.1	0.7	-0.5
Iowa.....	4.6	16,362	16,422	16,334	16,381	0.3	-0.5	0.2
Kansas.....	-7.6	11,677	11,482	11,537	11,414	-1.6	0.4	-1.0
Kentucky.....	-0.6	11,306	11,222	11,400	11,660	-0.7	1.5	2.2
Louisiana.....	1.2	15,980	15,110	14,140	14,900	-5.4	-6.4	5.3
Maine.....	0.6	4,499	4,500	4,323	4,466	0.0	-3.9	3.3
Maryland.....	-5.2	20,149	20,119	20,324	20,335	-0.1	1.0	0.0
Massachusetts.....	5.4	30,000	35,593	35,063	34,960	18.6	-1.5	-0.2
Michigar.....	-11.1	37,222	35,189	37,400	36,470	-5.4	6.3	-2.5
Minnesota.....	-11.4	20,711	20,090	20,400	20,650	-2.9	1.5	1.2
Mississippi.....	9.0	11,348	11,357	11,341	11,500	0.0	-0.1	1.4
Missouri.....	9.9	22,954	23,372	23,514	23,240	1.8	0.6	-1.1
Montana.....	17.0	3,090	3,050	3,030	3,136	-1.2	-0.6	3.4
Nebraska.....	0.8	8,219	7,998	8,186	8,211	-2.6	2.3	0.3
Nevada.....	40.7	3,384	3,417	3,420	3,713	0.9	0.0	8.5
New Hampshire.....	24.2	4,636	4,617	4,734	4,194	-0.4	2.5	-11.4
New Jersey.....	-11.7	31,824	31,378	30,965	31,074	-1.4	-1.3	0.3
New Mexico.....	26.8	6,490	6,230	6,210	6,150	-4.0	-0.3	-0.9
New York.....	-6.7	90,700	90,000	88,700	91,500	-0.7	-1.4	3.1
North Carolina.....	30.6	21,958	21,739	23,169	23,169	-0.9	6.5	0.0
North Dakota.....	6.9	2,780	2,677	2,692	2,918	-3.7	0.5	8.3
Ohio.....	-14.3	41,190	39,965	43,609	46,378	-2.9	9.3	6.4
Oklahoma.....	20.8	16,779	17,011	16,780	17,000	1.3	-1.8	1.7
Oregon.....	-4.4	10,455	9,920	10,157	10,514	-5.1	2.3	3.5
Pennsylvania.....	-3.9	54,938	54,036	53,406	53,092	-1.6	-1.1	-0.5
Rhode Island.....	5.8	3,826	3,860	3,825	4,351	0.8	-0.9	13.7
South Carolina.....	10.8	11,622	11,640	12,070	12,200	0.1	3.6	1.0
South Dakota.....	-8.6	2,612	2,655	2,635	2,546	1.6	-0.7	-3.3
Tennessee.....	-1.5	14,696	14,872	14,816	15,114	1.1	-0.3	2.0
Texas.....	20.6	74,505	76,489	76,881	78,720	2.6	0.5	2.4
Utah.....	-4.0	5,826	6,017	6,204	6,250	3.2	3.1	0.7
Vermont.....	27.8	3,310	3,305	3,391	3,495	-0.1	2.6	3.0
Virginia.....	0.4	23,125	23,013	23,688	24,867	-0.4	3.8	4.0
Washington.....	14.3	15,956	15,951	16,251	16,493	0.0	1.8	1.4
West Virginia.....	13.2	9,930	9,765	10,130	10,010	-1.6	3.7	-1.1
Wisconsin.....	-2.2	22,364	21,500	20,250	19,600	-3.8	-5.8	-3.2
Wyoming.....	47.1	2,172	2,493	2,270	2,345	14.7	-8.9	3.3

SOURCE: Basic Data from the National Education Association, Estimates of School Statistics, Selected Years.

Chapter 6: Salaries

Gains for teachers have been greatest in how much they are getting paid. Salary increases for teachers have outstripped the rate of inflation every year since 1981-82. The $25,257 average salary of a public school teacher in 1985-86 was up 31 percent from the 1981-82 figure of $19,270. This compares with an 18 percent increase in average earnings for all American workers during the period.

The rates of increase for teachers' salaries in each of the last four years were: 7.5 percent from 1981-82 to 1982-83, 6.2 percent from 1982-83 to 1983-84, 6.9 percent the following year and 7.2 percent from 1984-85 to 1985-86. The rates of inflation for those years were: 6.1 percent in 1982, 3.2 percent in 1983, 4.3 percent in 1984 and 3.6 percent in 1985.

According to an analysis by the American Federation of Teachers (AFT), "the purchasing power for teachers, measured in 1986 dollars according to the Consumer Price Index for All Urban Consumers, has risen nearly $4,000 since 1981....purchasing power for teachers has been nearly restored to the peak purchasing power period of 1971-72."[,1]

While the nation's 2.18 million teachers in public elementary and secondary schools still do not earn as much, on the average, as the 2.2 million lawyers, doctors, dentists, accountants and engineers in the United states, their salaries are by no means among the lowest for workers of comparable age and education level. The average earnings of Americans with four or more years of college between the ages of 35 and 44 years in 1985 was $32,094. For males in this category, the mean earnings were $39,874 and for females, $19,634. For all workers in this age group with four or more years of college education who worked full-time, year-round, the mean earnings for both sexes combined in 1985 were $36,792; for males, $42,337 and for females, $24,604. For teachers ages 35 to 44, on 9-10-month contracts, the average salary in 1985-86 was $24,936. For male teachers it was $26,538 and for

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1. AFT Research Report: Survey and Analysis of Salary Trends 1986, The American Federation of Teachers, Washington, D. C., page 14.

female teachers, $24,016. Sixty-nine percent of all public school teachers are women.

Data collected by the Bureau of Labor Statistics scheduled for release in late November 1986 shows that, while teachers' salaries rose 31 percent since 1981, the average salaries of others in "comparable" occupations -- such as engineers, lawyers, accountants, chemists, and job analysts -- rose 22 percent from 1981 to 1985.

Whether or not teachers are paid enough is a topic of much heated debate. Teachers themselves, 80 percent of whom in public schools belong to a union, have been complaining about their salaries. In the survey of teachers conducted by the National Center for Education Information this year, 88 percent of public school teachers, compared with 50 percent of all workers in America, said they are not paid enough for the work they do. On a life-satisfaction question, teachers reported higher levels of satisfaction with every aspect of their lives, including their jobs, but excluding their income, than college graduates, who in turn report higher levels of satisfaction than the general public.

A survey conducted by the Gallup Organization for the National Education Association in each of the last two summers -- 1985 and 1986 -- shows the public thinks its local school districts are having trouble finding enough good teachers because they are not paid enough. When asked what they think teachers with 15 years' experience ought to be paid, the public put the figure at about $3,000 more per year than teachers currently were being paid in each of those years for both elementary and secondary teachers.

The proportion of workers in the United States making big salaries is rather small. Only four percent of America's entire workforce make $50,000 or more. Of the 21-million full-time, year-round workers with one or more college degrees, only 2.6 million (12 percent) earn $50,000 or more. They constitute only 2.1 percent of the entire workforce in America.

The Income Division of the Bureau of the Census counts anyone who works 35 or more hours per week as full-time and anyone who works 50 or more weeks per year as year-round. The National Education Association's Status of the American Public School Teacher 1980-81 shows the average number of hours of the required school week was 36.5 (7.3 hours per day) -- about the same for the last 20 years. The report also shows the mean number of teaching contract days to be 180 days in 1980-81 and that the mean number of days scheduled for activities other than teaching (such as orientation and in-service) was six.[,2]

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2. The NEA has conducted surveys on the status of American public school teachers every five years since 1956. The latest published report was in 1980-81.

According to the Census Bureau, only 13.5 percent of male baby-boomers and 2.1 percent of women in the 25-to-44-year-old age group make $30,000 or more. Looked at another way, while 4.5 million baby-boomers make $35,000 or more, six times as many -- some 30 million -- make less than $15,000 a year.

Only 4.3 million (six percent) of all full-time, year-round workers in America made $50,000 or more in 1984. Only 340,000 of the 26,537,000 of the full-time, year-round working women in 1984 earned $50,000 or more. That's 0.48 percent of the 70 million full-time, year-round workforce and 0.8 percent of all full-time, year-round working women. More than half (146,000) of those women had five or more years of college, 178,000 had four or more years of college.

The number of males making $50,000 a year or more was 3.9 million in 1984. They constituted 5.6 percent of the entire full-time, year-round workforce. Only 18 percent of men with four or more years of college made $50,000 or more in 1984.

Table 25.

PERCENTAGE OF TEACHERS WHOSE SALARIES, HOUSEHOLD INCOMES, AND FAMILY INCOMES FALL INTO GIVEN INCOME INTERVALS: 1986

(Income Intervals in thousands)

Base:		Average	< $15	15-20	20-25	25-30	30-35	35-50	50-75	75+
		All Private School Teachers								
401	Salary	$14,771	53	30	11	4	2	0	*	0
373	Household Income		13	12	9	8	14	25	15	
		All Public School Teachers								
999	Salary	$24,559	9	19	28	21	14	9	0	0
1000	Household Income		7	4	9	8	11	28	25	8
795	Family Income	$47,421	1	3	6	6	10	44	31	9
		Public School Teachers With 4 Years of College								
194	Salary	$19,905	9	40	33	12	5	*	0	0
196	Household Income		3	9	15	7	11	27	21	6
160	Family Income	$42,904	3	6	9	5	13	29	26	5
		Public With 4 Years of College and Over								
981	Salary	$24,376	4	20	30	23	14	9	*	0
982	Household Income		1	4	9	9	11	30	27	8
787	Family Income	$47,556	1	3	6	6	9	34	33	8
		Public With 5 Years of College and Over								
786	Salary	$25,480	2	15	29	26	17	10	*	0
786	Household Income		*	3	8	9	11	31	28	9
627	Family Income	$48,742	*	2	4	6	8	34	35	10

* Less than 0.5%

Table 26.

Age	MEAN EARNINGS OF FULL-TIME, YEAR-ROUND WORKERS (average 250 work days)			AVERAGE SALARY OF TEACHERS (average 180 work days)		
	Both Sexes	Male	Female	Both Sexes	Male	Female
Totals Regardless of Education						
18-24	$12,781	$13,658	$11,706	$15,953	$15,826	$16,546
25-34	20,253	22,716	16,303	19,212	20,274	18,532
35-44	25,397	29,598	17,925	24,817	25,512	23,205
45-54	24,998	30,113	16,352	25,845	28,120	24,644
55-64	24,320	28,809	15,930	27,074	29,619	5,214
65+	22,007	25,957	12,457			
average	22,174	25,884	16,036	23,590	25,807	22,813
4 Years of College						
18-24	$17,051	$19,170	$15,445	$ *	$15,852	$15,550
25-34	23,446	26,360	19,287	17,955	19,297	17,305
35-44	31,703	35,491	22,216	20,009	19,972	20,025
45-54	35,970	41,891	21,184	20,454	21,155	20,262
55-64	36,433	40,516	21,285	22,133	25,366	21,567
65+	34,668	39,231	19,210			
average	28,497	33,086	19,885	19,288		
4 Years College and Over						
18-24	$17,482	$19,640	$15,847	$ *	$15,768	$15,998
25-34	24,843	27,959	20,041	19,304	20,313	18,935
35-44	34,417	38,446	24,452	24,416	25,985	23,515
45-54	37,982	43,376	24,486	25,905	28,324	24,478
55-64	39,078	43,170	25,686	27,108	30,183	25,576
65+	35,758	39,327	20,593			
average	31,492	36,104	22,072	23,620	25,817	22,813
5 Years of College and Over						
18-24	$	$25,331	$20,648	$ *	$15,504	$17,571
25-34	27,578	30,822	21,744	19,821	20,831	19,492
35-44	36,958	41,234	26,509	25,232	27,105	24,102
45-54	39,878	44,774	27,605	27,333	29,305	25,951
55-64	42,117	46,412	29,831	27,813	30,466	26,329
65+	36,595	39,395	22,089			
average	35,437	39,829	25,370	24,690		

Note: Mean Earnings from the U.S. Bureau of the Census are for 1984 -- the latest year available. Average salaries for teachers reported in the NCEI survey were for the 1985-86 school year and were adjusted to 1984 dollars using the Consumer Price Index.

Table 27.

NUMBERS OF MALES WORKING FULL-TIME, YEAR-ROUND IN INCOME INTERVALS BY AGE GROUP: 1984:

(in thousands)

Age	Total	< $15	15-20	20-25	25-30	30-35	35-50	50-75	75+
				Total Regardless of Education					
18-24	4,126	2,561	787	454	191	73	39	17	5
25-34	13,597	3,282	2,536	2,506	2,042	1,352	1,435	338	105
35-44	11,604	1,679	1,447	1,660	1,747	1,517	2,179	958	416
45-54	7,966	1,314	874	986	1,078	976	1,588	766	385
55-64	5,682	1,001	705	748	789	644	975	491	329
65+	802	158	130	89	73	73	109	90	80
Total	43,777	9,995	6,479	6,443	5,920	4,635	6,325	2,660	1,320
				4 Years of College					
18-24	286	82	60	76	40	18	11	1	0
25-34	2,481	310	419	424	455	343	384	113	32
35-44	2,018	146	169	209	271	252	580	292	101
45-54	1,060	66	64	67	91	93	319	244	116
55-64	799	75	33	58	76	73	205	155	124
65+	88	11	7	2	5	15	17	10	21
Total	6,732	690	752	836	938	794	1,516	815	394
				4 Years of College and Over					
18-24	572	164	120	152	80	36	22	2	0
25-34	4,962	620	838	848	910	686	768	226	64
35-44	4,036	292	338	418	542	504	1,160	584	202
45-54	2,120	132	128	134	182	186	638	488	232
55-64	1,598	150	66	116	152	146	410	310	248
65+	176	22	14	4	10	30	34	20	42
Total	13,464	1,380	1,504	1,672	1,876	1,588	3,032	1,630	788
				5 Years of College and Over					
18-24	24	3	5	4	7	1	1	0	2
25-34	1,387	147	186	222	193	148	330	115	46
35-44	2,140	90	107	192	266	275	579	394	235
45-54	1,127	50	32	69	101	122	315	256	180
55-64	654	43	24	45	54	39	159	151	140
65+	124	14	7	6	6	17	13	27	34
Total	5,456	347	361	538	627	602	1,397	943	637

Source: U.S. Bureau of the Census

Table 28.

NUMBERS OF FEMALES WORKING FULL-TIME, YEAR-ROUND IN INCOME INTERVALS BY AGE GROUP: 1984

(in thousands)

Age	Total	< $15	15-20	20-25	25-30	30-35	35-50	50-75	75+
				Total Regardless of Education					
18-24	3,367	2,559	542	179	43	20	16	5	4
25-34	8,487	3,779	2,169	1,413	610	250	221	38	8
35-44	6,552	2,589	1,384	1,107	692	340	328	85	27
45-54	4,734	2,191	1,031	656	359	201	199	75	20
55-64	3,059	1,389	706	407	235	142	112	46	23
65+	338	163	82	36	27	15	6	2	7
Total	26,537	12,670	5,914	3,798	1,966	968	882	251	89
				4 Years of College					
18-24	377	178	125	42	6	11	6	5	2
25-34	1,747	486	457	423	203	82	79	11	4
35-44	807	155	171	190	138	47	72	22	11
45-54	426	99	88	89	63	31	36	13	7
55-64	218	35	44	55	28	27	18	11	0
65+	26	9	7	2	2	2	2	1	2
Total	3,601	962	892	801	440	200	213	63	26
				4 Years of College and Over					
18-24	754	356	250	84	12	22	12	10	4
25-34	3,494	972	914	846	406	164	158	22	8
35-44	1,614	310	342	380	276	94	144	44	22
45-54	852	198	176	178	126	62	72	26	14
55-64	436	70	88	110	56	54	36	22	0
65+	52	18	14	4	4	4	4	2	4
Total	7,202	1,924	1,784	1,602	880	400	426	126	52
				5 Years of College and Over					
18-24	32	7	6	10	5	3	1	0	0
25-34	770	123	197	198	105	73	57	14	3
35-44	875	61	134	192	191	124	118	45	8
45-54	449	32	52	94	76	73	82	35	5
55-64	229	12	14	39	53	37	39	23	12
65+	24	0	4	8	3	4	2	0	1
Total	2,379	235	407	541	433	314	299	117	29

Source: U.S. Bureau of the Census

Teacher Salaries State by State

Every state in the nation raised its average salary for teachers last year. Eighteen states did so at a rate higher than the national average of 7.2 percent, and seven of these at a rate higher than 10 percent. The year before last -- from 1983-84 to 1984-85 -- all but four states showed an increase in average salary for teachers -- 27 at a rate equal or above the 6.9 percent national average increase with 11 registering an increase higher than 10 percent. The year before that -- from 1982-83 to 1983-84 -- half (26) the states raised their average salary for teachers at a rate greater than the average of 6.2 percent, and five of them raised teachers' salaries more than 10 percent. Two states raised teachers' salaries more than 10 percent in two consecutive years since 1982-83 -- Alabama and Arkansas.

In just the last three years -- between 1982-83 and 1985-86 -- the average salary for teachers in the nation's public elementary and secondary schools rose by 20.3 percent.

While it is true the average salary for teachers is below the national average in 31 states, it must be noted the per capita income in each of those states -- plus in four additional ones -- is lower than the national average per-capita income.

Teacher Salaries Compared With Those of Other Workers State by State

Without exception, every state has raised its average salary for teachers at rates higher than inflation and higher than those of other government employees. Also, without exception in every state, the average salary for teachers outstrips the mean annual earnings of all workers in the private sector. With the exception of the state of Washington, the percentage change in salaries for teachers from 1984-85 to 1985-86 outstripped the percentage change in annual pay for all workers covered by State and Federal Unemployment Insurance (UI) programs.

According to data compiled by the American Federation of Teachers (AFT), average salaries for teachers were higher than annual earnings of workers in the private sector in every state in 1986. The AFT shows an average salary for teachers for the year of $25,240 and annual earnings of $19,488 for the private sector.

Data from the Bureau of Labor Statistics shows a 4.5 percent change in annual pay for workers covered by Unemployment Insurance (UI) and Unemployment Compensation for Federal Employees (UCFE) programs from 1984 to 1985, taking annual pay for these workers to $19,186. Using the NEA's salary figures for teachers, the change for teachers from 1984-85 to 1985-86 was 7.2 percent. The average salary for teachers in the latter year was $25,257. The percentage change for teachers between the two years was greater than for all workers in every state except Washington and was about the same for New Mexico.

TABLE 29

TOTAL TEACHERS' SALARIES

State	1982-1983	1983-1984	1984-1985	1985-1986	% Changes 1982-1983 to 1983-1984	% Changes 1983-1984 to 1984-1985	% Changes 1984-1985 to 1985-1986
United States.....	20,715	22,019	23,546	25,257	6.2	6.9	7.2
Alabama.....	17,850	18,000	20,209	22,934	0.8	12.2	13.4
Alaska.....	33,983	36,564	39,751	41,480	7.8	8.8	4.4
Arizona.....	19,962	21,605	23,380	24,680	8.2	8.2	5.5
Arkansas.....	15,029	16,929	18,933	19,538	12.6	11.8	3.1
California.....	24,035	26,403	26,300	29,750	9.8	-0.3	13.1
Colorado.....	21,470	22,895	24,456	25,900	6.6	6.8	5.9
Connecticut.....	20,731	22,624	24,520	26,610	9.1	8.3	8.5
Delaware.....	20,625	20,925	23,300	24,625	1.4	11.3	5.6
District of Columbia.	25,610	27,659	28,621	33,990	8.0	3.4	18.7
Florida.....	18,275	19,545	21,057	22,296	6.9	7.7	5.8
Georgia.....	17,412	18,505	20,494	22,080	6.2	10.7	7.7
Hawaii.....	24,796	24,357	24,628	25,845	-1.7	1.1	4.9
Idaho.....	17,585	18,640	19,700	20,969	5.9	5.6	6.4
Illinois.....	22,315	23,345	25,829	27,190	4.6	10.6	5.2
Indiana.....	20,123	21,587	23,089	24,333	7.2	6.9	5.3
Iowa.....	19,257	20,140	20,934	21,690	4.5	3.9	3.6
Kansas.....	18,231	19,598	21,208	22,768	7.4	8.2	7.3
Kentucky.....	18,385	19,780	20,100	20,940	7.5	1.6	4.1
Louisiana.....	18,420	19,100	19,690	20,460	3.6	3.0	3.9
Maine.....	16,248	17,328	18,329	19,583	6.6	5.7	6.8
Maryland.....	22,786	24,095	25,861	27,186	5.7	7.3	5.1
Massachusetts.....	21,440	22,500	24,110	25,849	4.9	7.1	7.2
Michigan.....	26,556	28,877	28,401	30,168	8.7	-1.6	6.2
Minnesota.....	22,296	24,480	25,920	26,970	9.7	5.8	4.0
Mississippi.....	14,320	15,895	15,971	18,443	10.9	0.4	15.4
Missouri.....	17,521	19,300	20,452	21,884	10.1	5.9	7.0
Montana.....	19,488	20,657	21,705	22,492	5.9	5.0	3.6
Nebraska.....	17,412	18,785	20,153	20,939	7.8	7.2	3.9
Nevada.....	22,070	23,000	22,520	25,620	4.2	-2.0	13.7
New Hampshire.....	16,549	17,376	18,577	20,148	4.9	6.9	8.4
New Jersey.....	21,536	23,044	25,125	28,216	7.0	9.0	12.3
New Mexico.....	20,470	20,760	22,064	22,526	1.4	6.2	2.0
New York.....	25,000	26,750	29,000	30,200	7.0	8.4	4.1
North Carolina.....	17,585	18,014	20,691	22,476	2.4	14.8	8.6
North Dakota.....	18,390	20,363	19,900	20,816	10.7	-2.2	4.6
Ohio.....	20,004	21,421	22,737	24,500	7.0	6.1	7.7
Oklahoma.....	18,270	18,490	18,930	21,419	1.2	2.3	13.1
Oregon.....	21,746	22,833	24,889	25,788	4.9	9.0	3.6
Pennsylvania.....	21,178	22,800	24,435	26,009	7.6	7.1	6.4
Rhode Island.....	23,175	24,641	27,384	29,470	6.3	11.1	7.6
South Carolina.....	16,523	17,500	19,800	21,428	5.9	13.1	8.2
South Dakota.....	15,595	16,480	17,356	18,095	5.6	5.3	4.2
Tennessee.....	17,380	17,900	20,060	21,800	2.9	12.1	8.5
Texas.....	19,550	20,100	22,600	24,419	2.8	12.4	8.0
Utah.....	19,859	20,256	21,307	22,341	1.9	5.1	4.8
Vermont.....	16,271	17,931	19,043	20,325	10.2	6.0	6.8
Virginia.....	18,535	19,867	21,556	23,382	7.1	8.4	8.5
Washington.....	23,488	24,780	25,610	26,015	5.5	3.3	1.5
West Virginia.....	17,322	17,482	19,563	20,625	0.9	11.9	5.4
Wisconsin.....	21,496	23,000	24,780	26,800	6.9	7.7	8.1
Wyoming.....	23,690	24,500	26,709	27,876	3.4	9.0	4.3

SOURCE: Basic Data from the National Education Association, Estimates of School Statistics, Selected Years.

TABLE 30

Table 1. Average annual pay for 1984 and 1985 and percent change for all covered workers 1/ by State

State	Average annual pay		Percent change, 1984-85 3/	State	Average annual pay		Percent change, 1984-85 3/
	1984	1985 2/			1984	1985 2/	
UNITED STATES 4/	$18,353	$19,186	4.5				
Alabama.....	16,203	17,023	5.1	Missouri.....	$17,600	$18,338	4.2
Alaska.....	28,806	28,699	-0.4	Montana.....	15,560	15,932	2.4
Arizona.....	17,349	18,037	4.0	Nebraska.....	15,162	15,616	3.0
Arkansas.....	14,973	15,553	3.9	Nevada.....	17,565	18,179	3.5
California.....	19,898	20,950	5.3	New Hampshire.....	16,164	17,205	6.4
Colorado.....	18,797	19,569	4.1	New Jersey.....	19,871	21,077	6.1
Connecticut.....	20,010	21,226	6.1	New Mexico.....	16,426	16,989	3.4
Delaware.....	18,505	19,150	3.5	New York.....	20,752	21,901	5.5
District of Columbia..	25,121	26,160	4.1	North Carolina.....	15,428	16,226	5.2
Florida.....	16,184	16,958	4.8	North Dakota.....	15,289	15,588	2.0
Georgia.....	16,954	17,912	5.7	Ohio.....	18,786	19,433	3.4
Hawaii.....	16,701	17,329	3.8	Oklahoma.....	17,612	18,196	3.3
Idaho.....	15,793	16,353	3.5	Oregon.....	17,392	17,837	2.6
Illinois.....	19,722	20,601	4.5	Pennsylvania.....	17,931	18,649	4.0
Indiana.....	17,832	18,501	3.8	Rhode Island.....	16,150	16,864	4.4
Iowa.....	15,668	16,097	2.7	South Carolina.....	15,305	15,944	4.2
Kansas.....	16,675	17,331	3.9	South Dakota.....	13,530	13,987	3.4
Kentucky.....	16,627	16,941	1.9	Tennessee.....	16,217	16,987	4.7
Louisiana.....	17,768	18,216	2.5	Texas.....	18,860	19,616	4.0
Maine.....	14,850	15,428	3.9	Utah.....	17,174	17,577	2.3
Maryland.....	(5)	(5)	(5)	Vermont.....	15,264	16,023	5.0
Massachusetts.....	18,414	19,627	6.6	Virginia.....	17,271	18,089	4.7
Michigan 6/	20,931	21,969	5.0	Washington.....	18,382	18,949	3.1
Minnesota.....	18,043	18,818	4.3	West Virginia.....	17,479	18,019	3.1
Mississippi.....	14,399	14,951	3.8	Wisconsin.....	17,026	17,594	3.3
				Wyoming.....	18,318	18,950	3.4

1/ Includes workers covered by Unemployment Insurance (UI) and Unemployment Compensation for Federal Employees (UCFE) programs.

2/ Data are preliminary.

3/ Percent changes were computed from unrounded average annual pay data and may differ from those computed using data rounded to the nearest dollar.

4/ Includes data for Maryland not shown separately.

5/ Comparable data for Maryland for 1984 and 1985 are not available. See Technical Note for more information.

6/ Based on estimated data for the second, third, and fourth quarters of 1985.

SOURCE: U.S. Bureau of Labor Statistics, "Average Annual Pay by State and Industry, 1985," p. 5.

TABLE 31

American Federation of Teachers Salary Report
AVERAGE SALARY OF TEACHERS COMPARED TO ANNUAL EARNINGS IN THE PRIVATE SECTOR, 1986

Rank	State	Annual Earnings		Ratio of Teachers To Private Sector
		Teachers	Private Sector	
1	Rhode Island	$29,470	$16,644	1.77
2	Hawaii	26,038	16,845	1.55
3	Wisconsin	26,720	17,565	1.52
4	Alaska	41,647	28,489	1.46
5	Montana	22,482	15,526	1.45
6	Maryland	26,580	18,546	1.43
7	Nevada	25,606	17,922	1.43
8	Wyoming	27,461	19,255	1.43
9	Minnesota	27,360	19,256	1.42
10	Oregon	25,664	18,154	1.41
11	Washington	26,182	18,810	1.39
12	California	29,258	21,324	1.37
13	Pennsylvania	26,006	19,041	1.37
14	South Carolina	21,428	15,762	1.36
15	Massachusetts	26,800	19,764	1.36
16	Colorado	25,892	19,133	1.35
17	New York	30,490	22,536	1.35
18	North Dakota	20,815	15,409	1.35
19	Florida	22,250	16,491	1.35
20	Nebraska	20,834	15,470	1.35
21	North Carolina	22,476	16,770	1.34
22	New Mexico	22,526	16,835	1.34
23	Kansas	22,644	16,980	1.33
24	Iowa	21,802	16,406	1.33
25	D.C.	32,067	24,247	1.32
26	Arizona	23,931	18,121	1.32
27	South Dakota	18,095	13,702	1.32
28	Illinois	27,172	20,702	1.31
29	Alabama	22,934	17,496	1.31
30	New Jersey	28,000	21,368	1.31
31	Michigan	29,461	22,748	1.30
32	Virginia	23,388	18,091	1.29
33	Tennessee	21,800	17,021	1.28
34	Idaho	20,971	16,546	1.27
35	Georgia	23,046	18,247	1.26
36	Delaware	24,625	19,529	1.26
37	Utah	22,229	17,685	1.26
38	Ohio	24,988	19,881	1.26
39	Vermont	20,379	16,239	1.25
40	Arkansas	19,926	15,918	1.25
41	Indiana	24,248	19,382	1.25
42	Oklahoma	22,444	17,967	1.25
43	Mississippi	18,472	14,939	1.24
44	Connecticut	26,898	21,857	1.23
45	Maine	19,583	15,922	1.23
46	Kentucky	20,948	17,572	1.19
47	Texas	24,419	20,490	1.19
48	New Hampshire	20,263	17,530	1.16
49	Missouri	21,974	19,208	1.14
50	West Virginia	20,625	18,591	1.11
51	Louisiana	20,460	18,687	1.09
	U.S. Average/Total	$25,240	$19,488	1.30

SOURCE: The American Federation of Teachers, Survey and Analysis of Salary Trends 1986, page 10.

Beginning Teacher Salaries

Data collected by the American Federation of Teachers this year show not only big jumps in the average salaries for teachers but also for beginning teachers. The authors of the report, Survey and Analysis of Salary Trends 1986, Howard Nelson, Jewell Gould and Julie Silverwood, state:

> "While beginning offers for business for new college graduates in other white collar occupations remain high compared to beginning teachers (ranging from 62 percent more for engineers to 14 percent more for liberal arts graduates in 1985), the earnings advantage of these white collar occupations is at the lowest level since about 1978....
>
> "If beginning teachers could work and get paid for a 20 percent longer work year, their beginning salaries would exceed the starting salary of liberal arts majors in 1985-86, and match the starting salaries of business administration majors -- for the first time in 10 years! Furthermore, graduates in other white collar fields employed in the government sector earn $2,000 to $5,000 less than graduates employed in the private sector."[,3]

But illusions about money and teaching persist. College freshmen and sophomores in the Southeast (one of the regions that has the greatest demand for additional teachers) were asked last year to estimate what they thought they could earn in several different occupations in a survey conducted by the Southeastern Regional Council for Educational Improvement. The students overestimated the starting salaries of every occupation except teaching. They overestimated starting salaries of engineers, computer programmers and accountants by 17 to 21 percent, and underestimated those of teachers by six percent.

The bottom line is: Every state has responded to the need to raise salaries for teachers, with the result that they are no longer out of line with what one can realistically expect to make in most other occupations requiring a college degree.

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3. Survey and Analysis of Salary Trends 1986, The American Federation of Teachers, Washington, D.C., 1986, Page 34.

Chapter 7: Population Trends

As the nation faces the realities of how many and what kinds of teachers it needs now and in the future, it is important to know who the students to be taught are, how many of them there are and where they are.

The population of the United States continues to grow but at nowhere near the rates of yesteryear. According to the U. S. Bureau of the Census "middle series" projections, the population of the nation could reach zero growth by 2050. The Bureau projects the rate of growth in the 1980's (0.92 percent per year) would be less than in any previous decade except the 1930's (when it was 0.70 percent per year) and, after 1995, the population will grow more slowly than ever.

As far as schools are concerned, the population of young people in this nation is not expected to increase appreciably. The population under age 5 is expected to rise from its 1982 level of 17.4 million to 19.2 million in 1990 and fall slightly thereafter. According to the Census Bureau, the elementary-school-age population (5 to 13 years of age) hit a low of 29.6 million in 1985 and is expected to reach a high of about 34.4 million in the late 1990's (still about 2 million less than in the late 1960's and early 1970's), then fluctuate between 32 and 34 million during most of the 21st century.

The high-school-age group (14 to 17 years) -- now about 14.9 million -- has decreased steadily in size from 17 million since the mid-1970's and is expected to continue downward to about 13 million in 1990 then rise back up to 14 million by 1995 and level off around 15.4 million at the turn of the century.

Total Births and Fertility Rates

The 3.7 million births in 1985 were the most since 1965 but still considerably below the 4.3 million in 1957, the peak year of the baby boom. There were 15.7 births per 1,000 population in 1985, up from 15.6 in 1984 and 15.5 in 1983, but slightly below the birth rates of the early 1980's and far below the highest postwar birthrate of 26.5 in 1947.

TABLE 32. RESIDENT POPULATION, BY RACE: 1960-1983 AND PROJECTED 1985-2000, WITH PERCENT CHANGES

Race	RESIDENT POPULATION (in thousands) 1960	1970	1980	1981	1982	1983	Percent Change 1960-83
All Races	179,323	203,235	226,546	229,348	231,534	234,496	30.8
White	158,832	178,098	194,811	196,664	198,108	199,887	25.8
Blacks	18,872	22,581	26,631	27,153	27,589	28,215	49.5
Other Races	1,620	2,557	5,104	5,530	5,837	6,394	294.7

Race	PROJECTED 1985	1990	2000	Percent Change 1985-2000
Total	238,648	249,731	267,990	12.3
White	203,237	210,964	222,801	9.6
Black	29,107	31,452	35,795	23.0
By Age, All Races				
Under five	18,462	19,200	17,624	-4.5
5-17 years	44,352	45,123	49,762	12.2
18-24 years	28,715	25,777	24,590	-14.4
25-44 years	73,779	81,351	80,105	8.6
45-64 years	44,668	40,481	60,873	36.3
65 years and over	28,673	31,799	35,036	22.2
16 years and over	183,054	191,901	208,222	13.7
18 years and over	175,834	185,409	200,604	14.1

SOURCE: National Center for Education Information. Basic data from U.S. Bureau of the Census, "Statistical Abstract of the U.S. 1984."

The increase in number of births in the United States since 1975, Census explains, is due to larger numbers of women in the childbearing ages rather than an increase in fertility rates. According to the Census Bureau's middle series projections, the number of births will continue to rise, peaking around 3.9 million in the late 1980's, and then start falling again but remaining slightly above the 3.7 million in 1985 on into the early 1990's. After the early 1990's, there would never again be more than 3.7 million births because of a decline in the female population of childbearing age.

TABLE 33

Table B. Annual Measures of Fertility: 1930 to 1985

Calendar year	Crude birth rate[1]	General fertility rate[2]	Total fertility rate[3]	Calendar year	Crude birth rate[1]	General fertility rate[2]	Total fertility rate[3]
1985	15.7	66.1	[3]1,837	1954	25.2	117.9	3,537
				1953	24.9	115.0	3,418
1984	15.6	66.0	[3]1,814	1952	25.0	113.8	3,355
1983	15.5	65.8	1,803	1951	24.8	111.4	3,267
1982	15.8	67.3	1,829	1950	23.9	106.2	3,091
1981	15.8	67.4	1,815				
1980	15.9	68.4	1,840	1949	24.5	107.1	3,110
				1948	24.8	107.3	3,109
1979	15.5	67.2	1,808	1947	26.5	113.3	3,274
1978	15.0	65.5	1,760	1946	24.1	101.9	2,943
1977	15.1	66.8	1,790	1945	20.5	85.9	2,491
1976	14.5	65.0	1,738				
1975	14.6	66.0	1,774	1944	21.3	88.8	2,568
				1943	22.7	94.3	2,718
1974	14.8	67.8	1,835	1942	22.2	91.5	2,628
1973	14.8	68.8	1,879	1941	20.3	83.4	2,399
1972	15.5	73.1	2,010	1940	19.4	79.9	2,301
1971	17.1	81.6	2,267				
1970	18.2	87.9	2,480	1939	18.8	77.6	[4]2,238
				1938	19.2	79.1	[4]2,288
1969	17.9	86.5	2,465	1937	18.7	77.1	[4]2,236
1968	17.6	85.7	2,477	1936	18.4	75.8	[4]2,207
1967	17.9	87.6	2,573	1935	18.7	77.2	[4]2,250
1966	18.5	91.3	2,736				
1965	19.6	96.6	2,928	1934	19.0	78.5	[4]2,294
				1933	18.4	76.3	[4]2,235
1964	21.2	105.0	3,208	1932	19.5	81.7	[4]2,383
1963	21.9	108.5	3,333	1931	20.2	84.6	[4]2,467
1962	22.5	112.2	3,474	1930	21.3	89.2	[4]2,600
1961	23.5	117.2	3,629				
1960	23.8	118.0	3,654				
1959	24.3	119.9	3,705				
1958	24.5	120.0	3,693				
1957	25.2	122.7	3,760				
1956	25.1	121.0	3,682				
1955	24.9	118.3	3,574				

[1]Including Alaska, Hawaii, and Armed Forces overseas. Births corrected for underregistration through March 1970.

[2]Resident population including Alaska since 1959 and Hawaii since 1960. Births corrected for underregistration through 1959. For 1930 to 1985: National Center for Health Statistics, *Vital Statistics of the United States, 1980*, Vol. 1, Natality, DHHS Pub. No. (PHS) 85-1100. Public Health Service, Hyattsville, Md., 1984, tables 1-1 and 1-6; "Advance Report of Final Natality Statistics, 1983." *Monthly Vital Statistics Report*, Vol. 34, No. 6 Supplement DHHS Pub. No. (PHS) 85-1120. Public Health Service, Hyattsville, Md., 1985, tables 1 and 4; "Births, Marriages, Divorces, and Deaths for 1985." *Monthly Vital Statistics Report*, Vol. 34, No. 12, DHHS Pub. No. (PHS) 86-1120. Public Health Service, Hyattsville, Md., 1985, p. 1; and unpublished data.

[3]Estimated total fertility rates for 1984 and 1985 are based on indirect standardization and 1983 final age-specific birth rates.

[4]Total fertility rates for 1930-39 based on births adjusted for underregistration from National Center for Health Statistics (unpublished data consistent with birth rates published in National Center for Health Statistics, *Fertility Tables for Birth Cohorts by Color: United States, 1917-73*, April 1976) and female resident population from Current Population Reports, Series P-25, No. 311.

SOURCE: U.S. Bureau of the Census, "Estimates of the Population of the United States and Components of Change: 1970 to 1985," Series P-25, No. 990

The three basic period measures of fertility all rose slightly in 1984 and in 1985. The crude birth rate (births per 1,000 population) was 15.7 in 1985 -- 14 percent lower than in 1970 (18.2) and 38 percent lower than in 1957 (25.2). The general fertility rate (births per 1,000 women 15 to 44 years old) was 66.1 in 1985 -- 25 percent below the 1970 rate and 46 percent below the 1957 rate of 122.7. The total fertility rate (annual births expressed in terms of the implied completed fertility of 1,000 women) indicates the number of children that women would have in their lifetime, if, at each year of age, they experienced the age-specific birth rates occuring in a specified year. The total fertility rate was about 1,837 in 1985 -- less than half of the 1957 rate of 3,760. Between 1970 and 1985, the total fertility rate dropped by 26 percent.

In Census' middle series, the total fertility rate rises from a current 1,837 per 1,000 women to about 1,960 during the period stretching from 1995 to 2010. It then declines slowly to 1,900 births per 1,000 women in 2050 and is constant from then on.

Growth Rates of the Population by Race

The Census Bureau's middle series projections show the Black-and-other races population growing at a much faster rate than the White population. The White population is not expected ever to increase more than about 40 percent as rapdily as the Black-and-other races population. Black-and-other-races made up 10.7 percent of the total U.S. population in 1950, 12.4 percent in 1970, 14.5 percent in 1982 and is expected to increase about 1.3 percentage points a decade, taking the proportion up to 16.9 percent in 2000 and 25.5 percent in 2080.

TABLE 34

Racial Composition of Children by Age

Races	1980 <5	1980 5-13	1980 14-17	1983 <5	1983 5-13	1983 14-17	1985 <5	1985 5-13	1985 14-17
All	16,458	31,096	16,140	17,650	30,409	14,720	18,037	30,111	14,873
White	13,493	25,618	13,386	14,370	24,781	12,078	14,636	24,347	12,157
Black	2,476	4,623	2,373	2,652	4,625	2,216	2,706	4,667	2,229

% Changes

Races	1980 to 1983 <5	1980 to 1983 5-13	1980 to 1983 14-17	1983 to 1985 <5	1983 to 1985 5-13	1983 to 1985 14-17
All	7.2%	-2.2%	-8.8%	2.2%	-1.0%	+1.0%
White	6.5%	-3.2%	-9.8%	1.8%	-1.7%	+0.6%
Black	7.1%	0.0%	-6.6%	2.0%	+1.0%	+0.6%

As % of Total

Races	1980 <5	1980 5-13	1980 14-17	1983 <5	1983 5-13	1983 14-17	1985 <5	1985 5-13	1985 14-17
White	82.0	82.4	82.9	81.4	81.5	82.0	81.1	80.8	81.7
Black	15.0	14.9	14.7	15.0	15.2	15.0	15.0	15.5	15.0
Other	3.0	2.7	2.4	3.6	3.3	3.0	3.9	3.7	3.3

SOURCE: Basic data from the U.S. Bureau of the Census, "Estimates of the Population of the United States, by Age, Sex, and Race: 1980 to 1985," Series P-25, No. 985

The number of Black-and-other-races births is at an all-time high of 725,000 and is expected to increase to almost 900,000 in 2030 and then stabilize. The White total fertility rate is not expected to get above 1,900 births per 1,000 women. The Black total fertility rate -- now at 2,269 -- is expected to peak early at 2,345 per 1,000 women in 1990, then begin a slow fall to 1,900 births per 1,000 women in 2050.

TABLE 35. Recent Change in Population, by Region and by State. 1970-1980 and Projected 1980-2000

	1960-1970	1970-1980	1980-1990	1990-2000
U.S.	13.4	11.4	9.7	7.3
REGIONS				
Northeast	9.8	.2	-1.7	-4.2
North Central	9.6	4.0	2.1	-.9
South	14.3	20.0	15.9	12.8
West	24.2	23.9	22.2	18.1
STATES				
Alabama	5.4	13.1	8.0	4.8
Alaska	34.1	32.8	29.7	20.8
Arizona	36.3	53.1	46.5	39.8
Arkansas	7.7	18.9	12.6	9.9
California	27.1	18.5	16.0	11.2
Colorado	26.0	30.8	29.5	24.0
Connecticut	19.6	2.5	.7	-2.3
Delaware	22.9	8.4	5.5	1.3
District of Columbia	-.9	-15.6	-21.4	-24.9
Florida	37.1	43.5	36.6	31.0
Georgia	16.4	19.1	12.6	8.6
Hawaii	21.6	25.3	17.5	12.3
Idaho	6.9	32.4	28.0	24.6
Illinois	10.2	2.8	.5	-2.7
Indiana	11.4	5.7	3.1	-
Iowa	2.4	3.1	2.1	-.4
Kansas	3.2	5.1	4.0	1.3
Kentucky	6.0	13.7	10.9	8.1
Louisiana	11.9	15.4	12.5	8.7
Maine	2.6	13.2	9.1	6.4
Maryland	26.5	7.5	6.2	2.0
Massachusetts	10.5	.8	-.8	-3.7
Michigan	13.5	4.3	1.2	-2.0
Minnesota	11.5	7.1	6.5	3.1
Mississippi	1.8	13.7	9.2	6.4
Missouri	8.3	5.1	3.0	.1
Montana	2.8	13.3	12.6	8.4
Nebraska	5.2	5.7	4.2	1.4
Nevada	71.6	63.8	59.1	50.4
New Hampshire	21.6	24.8	23.4	19.7
New Jersey	18.2	2.7	1.8	-1.1
New Mexico	6.9	28.1	17.7	12.5
New York	8.7	-3.7	-6.5	-8.9
North Carolina	11.6	15.7	9.9	6.1
North Dakota	-2.2	5.7	3.6	.5
Ohio	9.8	1.3	-.6	-3.8
Oklahoma	9.9	18.2	15.5	12.6
Oregon	18.3	25.9	25.7	21.3
Pennsylvania	4.3	.5	-1.4	-4.4
Rhode Island	10.6	-.3	.2	-2.6
South Carolina	8.7	20.5	13.6	[illegible]
South Dakota	-2.2	3.7	.9	-1.6
Tennessee	10.1	16.9	10.2	6.8
Texas	16.9	27.1	22.5	18.5
Utah	18.9	37.9	38.7	36.1
Vermont	14.1	15.0	12.0	8.8
Virginia	17.2	14.9	11.2	7.2
Washington	19.6	21.1	21.0	16.4
West Virginia	-6.2	11.8	4.2	1.5
Wisconsin	11.8	6.5	6.7	3.6
Wyoming	.6	41.3	48.3	42.9

SOURCE: Selected data from U.S. Bureau of the Census, "Statistical Abstract of the United States, 1984," pp. 13 and 15.

The proportion of the Black-and-other-races population that is Black is expected to continue to decline because of the relatively high net immigration of races other than White or Black.

In 1985, Whites accounted for 84.8 percent of the total population, Blacks for 12.1 percent and "other races" for 3.1 percent. In 1980, the proportions were: Whites - 87.6 percent; Blacks - 11.1 percent and "other" - 1.3 percent. The change is more dramatic in the populations of children. The population under 5 in 1980 was 82.0 percent White, 15.0 percent Black and 3.0 percent "other races." In just five years -- in 1985 -- the proportions were: 81.1 percent White, 15.0 percent Black and 3.9 percent "other."

Regional Population Trends

Ninety percent of the nation's total population growth since 1980 has occurred in the South and West following a migratory trend toward the southern and western Sun Belt states, which began shortly after World War II and which picked up dramatically during the 1970's.

While the southern and western regions continue to grow in population at much faster rates than the Northeast and North Central regions, population growth has fallen off sharply in several southern and western energy-producing states since 1983. West Virginia, Oklahoma, and Wyoming were estimated to have lost population between July 1983 and July 1984, with decrease of 0.5, 0.4 and 0.8 percent, respectively, while Texas, Louisiana and Colorado experienced even more sharply reduced growth.

Six southern and western states had more than 10 percent growth between 1980 and 1984 -- Alaska (24.4), Nevada (13.8), Utah (13.0), Florida (12.6), Texas (12.4), Arizona (12.3) and Colorado (10.0). In Utah, natural increase accounted for almost three-fourths of the growth. In the other five states, over half of the growth was due to immigration.

The North continues to grow at a much lower rate than the rest of the nation. Of the 21 northern states, 15 experienced net outmigration between 1980 and 1984, resulting in a population loss in three states -- Michigan, Ohio and Iowa.

The Northeast continued to have moderate population growth in the 1980's after a decade of no increase. After losing population in the 1970's, New York and Rhode Island grew by 1.0 percent and 1.6 percent, respectively, between 1980 and 1984. New Hampshire is the fastest growing Northeastern state (6.1 percent) in the 1980's. The only other northern state which had a growth rate faster than the nation's (4.2 percent from 1980 to 1984) is North Dakota (5.2 percent).

Chapter 8: Where the Nation's Youth Goes to School

School Enrollment by Type of Community

The proportions of students who attend schools in metropolitan and non-metropolitan areas of the country have not changed in the last decade. Two-thirds of the nation's youth, ages 5 to 17 years, who are enrolled in school go to schools located in metropolitan areas of the country -- the same as in 1972. Where changes have occured are within metropolitan areas. The shift from Inner City to Outside Central Cities is notable, especially among black students.

While the number of White students decreased -- from 42.0 million in 1972 to 35.7 million in 1982 -- the proportion of White students enrolled in Inner City schools stayed about the same. In both years, approximately one in five White students was enrolled in a school in the Inner City. The number of Black students in 1982 was about the same as it was in 1972 -- approximately 6.5 million. However, the proportion of black students, ages 5 to 13 years, enrolled in Inner City schools dropped from 59.6 percent in 1972 to 53.3 percent in 1982. The decrease in 14-to 17-year-old Black students in Inner City schools dropped from 56.5 percent to 53.3 percent in the decade. The shift was from Inside Central Cities to Outside Central Cities within metropolitan areas. Three out of four Black students, compared with two out of three White students attend schools in metropolitan areas of the country.

The population, ages 5 to 17 years, of Spanish Origin grew from 2.8 million in 1972 to 3.7 million in 1982. The proportion of students of Spanish Origin enrolled in Inner City schools also grew from 50 percent in 1972 to 52 percent in 1982. Eight out of ten students of Spanish Origin enrolled in school in the United States are in metropolitan areas.

Whites make up 81.8 percent of all students ages 5 to 17 enrolled in public and private schools. Blacks, 14.8 percent and students of Spanish Origin, 8.5 percent).

TABLE 36

School Enrollment by Type of Community: 1982

(in thousands)

Ages	Total Enrolled	Metropolitan Total	%	Central Inner City Total	% of Metro in Central City	% of Total in Central City	Outside Inner City Total	Non-Met Total
All Races								
5-13	29,723	19,668	66.2	7,896	40.1	26.5	11,771	10,055
14-17	13,927	9,257	66.4	3,535	38.2	25.4	5,722	4,670
total	43,650							
White								
5-13	24,234	15,571	64.2	5,142	33.0	21.2	10,429	8,713
14-17	11,480	7,412	64.5	2,299	31.0	20.0	5,113	4,068
total	35,714							
Black								
5-13	4,442	3,330	74.9	2,390	71.8	53.8	941	1,112
14-17	2,045	1,518	74.2	1,091	71.9	53.3	427	527
total	6,487							
S.O.								
5-13	2,656	2,213	83.3	1,358	61.3	51.1	855	443
14-17	1,089	915	84.0	579	63.3	53.1	337	174
total	3,745							

School Enrollment by Type of Community: 1972

All Races								
5-13	34,247	23,181	67.7	9,977	43.0	29.1	13,204	11,067
14-17	15,464	10,260	66.3	4,145	40.4	26.8	6,115	5,006
total	49,711							
White								
5-13	28,993	19,241	66.4	6,924	36.0	23.9	12,315	9,753
14-17	13,059	8,619	66.0	2,921	33.9	22.3	5,694	4,440
total	42,052							
Black								
5-13	4,730	3,565	75.3	2,817	79.0	59.6	749	1,165
14-17	2,033	1,515	74.5	1,150	75.9	56.5	365	518
total	6,763							
Spanish Origin								
5-13	2,007	1,591	79.3	1,010	63.5	50.3	581	414
14-17	821	642	78.2	410	63.8	50.0	232	179
total	2,828							

SOURCE: U.S. Bureau of the Census, "School Enrollment - Social and Economic Characteristics of Students," 1985 and 1975, Series P-20, No. 409

Who Goes to Public Schools

About eight out of ten students enrolled in both public and private elementary and secondary schools are White. According to data from the Census Bureau, 79.0 percent of public elementary school enrollment in 1985 were White students, 17.3 percent were Black children, and 10.9 percent were of Spanish origin (Persons of Spanish origin may be of any race).

The proportion of public elementary school enrollment that is White has gone from 84.0 percent in 1960 to 83.0 percent in 1970, down to 80.0 percent in 1982 and in 1983 and 79.0 percent in 1985. The proportion of public elementary school enrollment made up of Black students was 15.9 percent in 1960, 16.0 percent in 1970, 16.2 percent in 1982, 16.4 percent in 1983 and 17.3 percent in 1985.

For public high schools, the percentages for White student enrollment were 88.1 in 1960, 85.6 in 1970, 81.0 in 1982, 80.8 in 1983 and 80.3 in 1985. Black students accounted for 11.8 percent of high school enrollment in 1960, 13.2 percent in 1970, 15.9 percent in 1982, 16.1 percent in 1983 and 16.2 percent in 1985.

The changes at the elementary level are slight for both Black and White students and are somewhat more significant for Black students at the secondary level. This is very much a function of more Black students at the high school level staying in school longer now than they did 15 to 25 years ago.

At the elementary level, according to Census data, the number of black children enrolled in public and private schools decreased by 11.5 percent in the last 15 years. -- from 4,868,000 in 1970 to 4,307,000 in 1985. The number of white children enrolled in elementary schools dropped at twice that rate -- from 28,638,000 in 1970 to 21,593,000 in 1985 representing a 24.6 percent decline. Census didn't collect enrollment data for students of Spanish origin in 1975, but data since 1977 show a steady increase of students in this group -- from 1,874,000 in 1977 to 2,803,000 in 1985 representing a 50 percent increase for the period.

In high schools, enrollments for Whites dropped 10.5 percent from 1970 to 1985 --12,723,000 compared with 11,378,000 -- and increased 16.2 percent for Blacks -- from 1,834,000 in 1970 to 2,131,000 in 1985. The number of high school students of Spanish origin rose from 928,000 in 1977 to 1,156,000 in 1985 representing a 24.5 percent increase in the last 12 years.

Who Goes to Private Schools

Much has been said recently about the increase in private school enrollments. It is not great at either the elementary or high school levels. In 1985, the proportion of all elementary students who were enrolled in private schools was 11.4 percent. It was 11.6 percent in 1970. At the high school level, 8.7 percent of students were enrolled in private schools in

TABLE 37

Table 1. School Enrollment of Persons 3 to 34 Years Old, by Level and Control of School, Race, and Spanish Origin: October 1960 to 1985

(Numbers in thousands. Civilian noninstitutional population. For meaning of symbols, see text)

Level and control of school	1985	1984	1983	1982	1981[1]	1981[2]	1980	1979	1978	1977	1976	1975	1970	1965	1960
ALL RACES															
Total enrolled	58,014	57,313	57,745	57,905	58,390	56,940	57,348	57,854	58,616	60,013	60,482	60,969	60,357	54,701	[4]46,260
Nursery school	2,491	2,354	2,350	2,153	2,058	2,026	1,987	1,869	1,824	1,618	1,526	1,748	1,096	520	(NA)
Public	854	761	809	739	663	657	633	636	587	562	476	574	333	127	(NA)
Private	1,637	1,593	1,541	1,423	1,396	1,369	1,354	1,233	1,237	1,056	1,050	1,174	763	393	(NA)
Kindergarten	3,815	3,484	3,361	3,299	3,161	3,069	3,176	3,025	2,989	3,191	3,490	3,393	3,183	3,057	2,092
Public	3,221	2,953	2,706	2,746	2,616	2,540	2,690	2,593	2,493	2,665	2,962	2,851	2,647	2,439	1,691
Private	594	531	656	553	545	529	486	432	496	526	528	542	536	618	401
Elementary school	26,866	26,838	27,198	27,412	27,795	27,059	27,449	27,865	28,490	29,234	29,774	30,446	33,950	32,474	30,349
Public	23,803	24,120	24,203	24,381	24,758	24,083	24,398	24,756	25,252	25,983	26,698	27,166	30,001	27,596	25,814
Private	3,063	2,718	2,994	3,031	3,037	2,976	3,051	3,109	3,238	3,251	3,075	3,279	3,949	4,878	4,535
High school	13,979	13,777	14,010	14,123	14,642	14,349	14,556	15,116	15,475	15,753	15,742	15,683	14,715	12,975	10,249
Public	12,764	12,721	12,792	13,004	13,523	13,249	(NA)	13,994	14,231	14,505	14,541	14,503	13,545	11,517	9,215
Private	1,215	1,057	1,218	1,118	1,119	1,100	(NA)	1,122	1,244	1,248	1,201	1,180	1,170	1,457	1,033
College	10,863	10,859	10,825	10,919	10,734	10,437	10,180	9,978	9,838	10,217	9,950	9,697	7,413	5,975	3,570
Public	8,379	8,467	8,183	8,354	8,159	7,911	(NA)	7,699	7,427	7,925	7,739	7,704	5,699	3,840	2,307
Private	2,483	2,392	2,640	2,565	2,576	2,525	(NA)	2,280	2,410	2,292	2,211	1,994	1,714	1,835	1,262
College:															
Full time	7,720	7,822	7,711	7,736	7,569	7,384	7,147	7,010	6,979	7,196	7,176	7,105	5,763	4,414	2,681
Percent	71.1	72.0	71.2	70.8	70.5	70.7	70.2	70.3	70.9	70.4	72.1	73.3	77.8	73.9	75.1
Part time	3,143	3,037	3,114	3,183	3,166	3,053	3,033	2,968	2,859	3,021	2,773	2,592	1,650	1,561	887
WHITE															
Total enrolled	47,452	46,941	47,423	47,662	48,169	47,098	47,673	48225	48,843	50,151	50,761	51,430	51,719	47,451	[4]40,348
Nursery school	2,087	1,915	1,932	1,783	1,685	1,657	1,637	1,537	1,456	1,314	1,246	1,432	893	451	(NA)
Public	617	543	563	504	447	441	432	428	351	372	316	392	198	93	(NA)
Private	1,470	1,372	1,369	1,279	1,238	1,216	1,205	1,110	1,105	942	929	1,040	695	358	(NA)
Kindergarten	3,060	2,788	2,769	2,677	2,597	2,514	2,595	2,437	2,452	2,611	2,881	2,845	2,706	2,648	1,849
Public	2,545	2,319	2,181	2,189	2,130	2,060	2,172	2,069	2,009	3,153	2,423	2,363	2,233	2,086	1,485
Private	515	469	588	489	467	453	423	368	444	458	457	483	473	562	364
Elementary school	21,593	21,730	22,054	22,297	22,663	22,081	22,510	22,959	23,524	24,262	24,776	25,412	28,638	27,679	26,035
Public	18,817	19,282	19,340	19,583	19,924	19,390	19,743	20,174	20,551	21,312	21,947	22,351	24,923	22,976	21,696
Private	2,776	2,449	2,714	2,713	2,739	2,691	2,768	2,785	2,973	2,950	2,829	3,059	3,715	4,703	4,339
High school	11,378	11,240	11,425	11,577	12,062	11,862	12,056	12,583	12,897	13,152	13,214	13,224	12,723	11,356	9,122
Public	10,258	10,266	10,339	10,541	11,035	10,849	(NA)	11,549	11,741	11,980	12,093	12,112	11,599	9,961	8,124
Private	1,120	974	1,086	1,036	1,027	1,013	(NA)	1,033	1,156	1,172	1,121	1,112	1,124	1,395	999
College	9,334	9,269	9,242	9,328	9,162	8,983	8,875	8,709	8,514	8,812	8,644	8,516	6,759	5,317	3,342
Public	7,131	7,163	6,949	7,102	6,906	6,754	(NA)	6,672	6,368	6,743	6,657	6,724	5,168	3,368	2,126
Private	2,203	2,105	2,293	2,227	2,256	2,229	(NA)	2,037	2,145	2,069	1,987	1,792	1,591	1,749	1,215
College:															
Full time	6,597	6,672	6,532	6,579	6,452	6,349	6,212	6,058	5,974	6,165	6,170	6,183	5,221	4,114	(NA)
Percent	70.7	72.0	70.7	70.5	70.4	70.7	70.0	69.6	70.2	70.0	71.4	72.6	77.2	77.3	(NA)
BLACK															
Total enrolled	8,444	8,226	8,199	8,262	8,350	8,262	8,251	8,317	8,416	8,584	8,518	8,400	7,829	[4]7,252	[4]5,910
Nursery school	332	340	326	305	284	294	294	278	312	250	226	276	178	72	(NA)
Public	212	179	215	192	182	187	180	185	210	171	146	171	129	37	(NA)
Private	120	161	111	113	102	107	115	95	102	78	80	105	49	35	(NA)
Kindergarten	625	563	476	508	474	477	490	497	451	496	542	468	426	407	240
Public	562	513	427	463	412	415	440	443	414	467	482	426	374	353	206
Private	63	51	48	45	62	62	50	54	36	30	61	42	53	54	37
Elementary school	4,307	4,123	4,153	4,196	4,291	4,281	4,259	4,296	4,356	4,387	4,430	4,509	4,868	4,796	4,313
Public	4,131	3,947	3,964	3,974	4,087	4,072	4,056	4,053	4,154	4,166	4,256	4,344	4,668	4,620	4,118
Private	175	177	189	220	204	208	202	243	202	221	175	165	200	176	195
High school	2,131	2,061	2,143	2,128	2,168	2,150	2,200	2,245	2,276	2,327	2,258	2,199	1,834	1,619	1,127
Public	2,068	2,002	2,057	2,073	2,102	2,085	(NA)	2,171	2,211	2,269	2,187	2,140	1,794	1,556	1,092
Private	63	59	86	55	65	65	(NA)	74	65	59	71	59	41	62	34
College	1,049	1,138	1,102	1,127	1,133	1,080	1,007	1,002	1,020	1,103	1,062	948	522	358	227
Public	860	918	858	865	898	857	(NA)	814	822	916	887	782	422	272	180
Private	190	220	245	263	235	223	(NA)	188	199	187	175	166	100	86	46
College:															
Full time	767	810	806	800	815	776	723	746	753	803	817	742	427	218	(NA)
Percent	73.1	71.2	73.1	71.0	71.9	71.9	71.8	74.6	73.8	72.8	76.9	78.3	81.8	79.6	(NA)
SPANISH ORIGIN[3]															
Total enrolled	5,070	4,284	4,618	4,478	4,551	4,378	4,263	3,608	3,455	3,516	3,623	3,741	(NA)	(NA)	(NA)
Nursery school	186	117	108	83	131	126	146	89	87	75	68	85	(NA)	(NA)	(NA)
Public	105	78	60	46	68	86	70	50	47	38	38	47	(NA)	(NA)	(NA)
Private	83	39	48	37	62	40	75	39	39	46	30	39	(NA)	(NA)	(NA)
Kindergarten	364	293	335	329	306	292	283	226	231	220	262	235	(NA)	(NA)	(NA)
Public	315	267	285	291	282	268	234	210	198	206	242	218	(NA)	(NA)	(NA)
Private	49	26	50	37	24	23	30	16	33	14	20	17	(NA)	(NA)	(NA)
Elementary school	2,803	2,384	2,548	2,301	2,474	2,373	2,363	1,934	1,893	1,874	1,934	2,062	(NA)	(NA)	(NA)
Public	2,607	2,218	2,323	2,076	2,239	2,146	2,134	1,745	1,704	1,656	1,768	1,858	(NA)	(NA)	(NA)
Private	196	166	225	225	235	227	228	189	188	220	165	204	(NA)	(NA)	(NA)
High school	1,156	986	1,104	1,072	1,130	1,101	1,048	920	868	928	932	948	(NA)	(NA)	(NA)
Public	1,090	909	1,027	995	1,050	1,029	(NA)	875	825	836	867	886	(NA)	(NA)	(NA)
Private	67	57	77	77	74	72	(NA)	45	43	92	65	61	(NA)	(NA)	(NA)
College	579	524	523	493	510	486	443	440	377	418	427	411	(NA)	(NA)	(NA)
Public	464	423	441	398	398	379	(NA)	365	315	357	354	358	(NA)	(NA)	(NA)
Private	116	91	82	96	112	107	(NA)	75	62	60	73	53	(NA)	(NA)	(NA)
College:															
Full time	[illegible]	356	335	312	343	326	294	314	231	287	297	287	(NA)	(NA)	(NA)
Percent	65.8	67.9	64.1	63.3	67.3	67.1	68.6	71.4	61.3	68.7	69.6	69.8	(NA)	(NA)	(NA)

[1] Controlled to 1980 census base.
[2] Controlled to 1970 census base.
[3] Persons of Spanish origin may be of any race.
[4] Enrollment figures for 1960 and 1965 are for Black and other races.
[5] Enrollment figures for 1960 are for the population 5 to 34 years old.

SOURCE: U.S. Bureau of the Census, "School Enrollment - Social and Economic Characteristics of Students: October 1985," Series P-20, No. 409, issued September 1986, page 4.

1985, compared with 8.0 percent in 1970.

The proportion of White elementary school students enrolled in private schools was 13.0 percent in 1970, 12.3 percent in 1983 and 12.8 percent in 1985. The proportion of Black elementary students in private schools was 4.1 percent in 1970 and 4.0 percent in both 1983 and 1985.

In high schools, the percentages of White students enrolled in private schools were 10.9 in 1970, 9.5 in 1983 and 9.8 in 1985. For Blacks, 3.0 percent of high school enrollees were in private schools in 1970, 4.0 percent in 1983 and 3.0 percent in 1985.

Summary and Conclusions

TEACHER CRISIS: MYTH OR REALITY? Most of the arguments used to build a case that there is a crisis in teaching are based on projections and speculation. Reliable data that are about teachers and their qualifications are hard to come by.

• Whether or not there are -- or will be -- teacher shortages depends on who's counting and how they are counting and for whom they are counting. Raw data indicate the numbers of people stepping forward to teach is keeping up with demand in all but a few content areas and regions of the country. There were about 61,000 more teachers and about 244,000 more students in the nation's public elementary and secondary schools in 1985-86 than there were two years earlier in 1983-84. That's an additional teacher for every four additional students.

• New teachers today are apt to be older. The average age of teachers who have entered the profession in the last five years is 33.0 years, about the same as those with five to nine years' experience (33.3). The average age at entry of new teachers is 26.5 years, compared with 22.5 for people who entered teaching when the baby boom children following World War II flooded the schools.

• People coming into teaching now are far from the bottom of the barrel. Sixty percent of teachers with less than five years' experience graduated from college with honors. Nearly a third of them graduated summa cum laude, magna cum laude or cum laude and 41 percent report they were on the Dean's List in college. Not only are the proportions of high school students and college freshmen expressing interest in going into education on the rise, the Scholastic Aptitude Test (SAT) scores of high school students who say they might major in education when they get to college are rising faster than the national average SAT scores.

• New teachers are entering teaching because they want to help young people develop -- the same reason teachers of all ages and levels of experience give for having gone into teaching and for staying in teaching. Seventy-one percent of teachers with less than five years' experience and 62 percent of all public school teachers say the most important thing to them on a job is "a chance to work with young people — see young people develop." Given the hypothetical opportunity to make more money elsewhere in another job

or by working a longer school year, teachers say, hands down, they prefer their current 9- or 10-month teaching jobs.

• The composition of the teaching force is getting more female and less minority at a time when the composition of the student body is increasingly minority. Seventy-three percent of teachers with less than 10 years' experience, compared with 59 percent with 25 or more years' experience and 69 percent of all public shcool teachers, are women. The proportion of student enrollment that is minority is about 27 percent, compared with a teaching force that is 91 percent White. The proportion of teachers with less than five years' experience who are Black is 4.9 percent compared with 9.5 percent of teachers who have been teaching 25 years or more who are Black. The proportions of teachers who are Hispanic and who are Asian, however, are greater for the cohort of teachers who have less than five years' experience than for any other group except teachers who have between 20 and 24 years of experience. The less-than-five-years' experience group is 3.2 percent Hispanic and 1.6 percent Asian, compared with the 20- to 24-years'-experience group that is 4.2 percent Hispanic.

• While salaries of the nation's 2.2 million public school teachers are not on par with those of 2.2 million lawyers, doctors, dentists, accountants and engineers, they are now in line with what can reasonably be expected for college graduates generally. Salaries for teachers have outstripped inflation and have risen faster than those for both the public and private sector in every state in the nation in the last three years.

• There is no way to conclude from the morass of certification requirements in any state whether or not a person holding a regular teaching certificate is truly qualified to teach. So the panic about people teaching on emergency certificates is not terribly justified. Given the state of the art of teacher certification, it is quite conceivable a person teaching on an emergency certificate could be more qualified to teach than one who holds a regular teaching certificate.

We simply do not know -- and currently have no means of finding out -- who is really qualified to teach and who is not because we do not have criteria that judge competence. The problem is made even more complex by the fact that the "good" and the "bad" are essentially treated alike in teaching. The system historically has not only tolerated, but protected, the incompetent. Usually the only criteria used to determine if a teacher gets hired back, not to mention how much he or she gets paid, is years of teaching experience and college courses accumulated.

There are thousands -- if not millions -- of adults in this nation who would love to teach and who are potentially competent to do so who find it hard to break into the system and who are turned off by the apparent absurdity of the certification requirements.